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Corporate Governance and Firm Financial Performance: The Nigerian Evidence

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Abstract

The study examines the board's independence, gender and ethnic minority diversity and firm's ownership structure in relation to performance. Its overall aim is to investigate the causal relationship between the internal governance mechanisms and firm's financial performance, and based on empirical findings make recommendations for improvement. The study uses the GMM methodology which permits simultaneous control of both endogeneity of independent variables and fixed effects. The data comprise hand-collected panel dataset of firms that are listed on the Nigerian Stock Exchange over the 12-year period (2004-2015).

The study provides evidence that, board independence enhances firm performance and that, performance impact of board independence is stronger in closely-held than the widely-held firms. Its findings suggest that the positive impact of board independence on firm performance is moderated by ownership structure. Findings also reveal an insignificantly negative association between the board independence and ownership concentration.

The study finds a negative and significant association between the executive directors' ownership, non-executive directors' ownership, institutional and non-institutional blockholders' ownership respectively and Tobin's Q. It provides evidence that, except for non-executive directors' ownership none of other forms of ownership improves firm performance.

Finally, regarding the investigation of both the agency and resource dependence role of the females and ethnic minorities on the Nigerian corporate boards, finding reveals a significantly positive association between the ethnic minority directors' representation, female directors' presence on the board and firm performance. Findings of the study further suggest that, the female

and ethnic minority directors are valued members of the corporate boards equally as the men and other ethnic director counterparts.

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Abbreviations and definitions

SAP:	Structural Adjustment Programme
CIPE:	Centre for International Private Enterprise
SEC:	Securities and Exchange Commission
NEDs:	Non-Executive Directors
INED:	Independent Non-Executive Directors
EFCC:	Economic Financial Crime Commission
CAMA:	Companies and Allied Matters Act
NJC:	Nigerian Judicial Commission
FDI:	Foreign Direct Investment
NSE:	Nigerian Stock Exchange
GMM:	Generalized Method of Moments
CPI:	Transparency International Corruption Index
GLS:	Generalized Least Squares

DSS:	Directorate of State Security
ROL:	Rule of Law
TI:	Transparency International
NEEDS:	National Economic Empowerment and Development Strategy
LEEDS:	Local Economic Empowerment and Development Strategy
CAC:	Corporate Affairs Commission
FRC:	Financial Reporting Council
NICOM	Nigerian Insurance Commission
NIPECOM	Nigerian Pension Commission
NDIC	Nigerian Deposit Insurance Commission

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CHAPTER ONE: INTRODUCTION

1.1.Introduction

The aim of this study is to investigate the impacts of internal corporate governance mechanisms on the financial performance of companies listed on the Nigerian Stock Exchange. The study will investigate the board and ownership structure respectively in relation to firm performance.

Prior to committing funds to an investment, the investor would need to ensure that the business is financially sound and will continue to be so in the foreseeable future. To have confidence that the business is being well-managed and will remain profitable, the potential investor among other criteria will want to check that, the annual reports and accounts and other relevant information have been certified by the external statutory auditors. Ironically, despite the related annual reports and accounts appearing satisfactory given that, the statutory auditors have certified these as being the true and fair view of the company's performance and state of financial position, many corporations' failures are usually reported shortly afterwards. For example, several of high-profile corporate collapses around the world have been reported over the last two decades[1] nonetheless they had clean reports issued on their performances and financial positions. These instances of corporate failure have been attributed to lack of sound corporate governance, with far-reaching effects not only on investors but on other stakeholders such as employees, creditors, suppliers, pensioners, the public etc.

[1] The most dramatic of these high-profile corporate failures include: Enron in 2001 in the US; Royal Ahold, a Dutch company in 2003; Parmalat, an Italian company in 2003; HIH, an Australian company in 2001; Satyam Computers Services, an Indian company in 2009 etc. The catastrophic collapse of many markets in Asian-Pacific countries in the 1990s is also significant. Large numbers of people had invested money into the region's stock markets but many made heavy losses when the markets crashed. Popular opinion was that the crash was largely due to a lack of transparency in the companies' financial reports, coupled with a lack of accountability of the companies' directors (Mallin, 2010).

In Nigeria, it is generally agreed that weak corporate governance has been responsible for recent corporate failures[2] (SEC code, 2011). To improve corporate governance, the Security and Exchange Commission (SEC) inaugurated a National Committee in September 2008 for the review of the 2003 code of corporate governance for public companies in Nigeria. Part of the mandate for the review was to identify weaknesses in the 2003 code and to consider how the mechanism for its enforceability could be improved. The committee was also required to identify constraints to good corporate governance and recommend ways of effecting greater compliance with the code. Nigeria, like many other emerging economies, has very weak legal/judicial system, thus the main impediment to improving corporate governance practices has always been the inability to enforce such regulations (Okpara, 2011; Angaye and Gwilliam, 2008). Whilst the Nigerian government has the capability to enforce laws and regulations, this often fails to happen as the institutions responsible for their enforcement have been involved in corruption, amongst other factors (Adegbite, 2012; PriceWaterHouseCopers, 2016). Weak institutional support for corporate governance equals a lack of enforcement, both in Nigeria and within the wider emerging economies.

Good corporate governance is theoretically associated with reduction in agency cost and thus may enhance the firm's financial performance (Jensen and Meckling, 1976; Davidson, 1998; Ntim, 2013). This is because first, good governance reduces the monitoring and bonding costs (Jensen and Meckling, 1976; Ntim et al. 2011) and second, good governance provides investors the optimism about the future cash flows (Jensen, 1986; Ntim et al. 2011a). Third, the cost and/or risk of outside funds tends to fall as the value of equity rises (Chen et al., 2009), thus leading to improved corporate performance (Ntim, 2013). Empirical evidence as provided by prior studies also offer support for the theory which emphasises that, improved firm performance is associated

[2] Forty-five banks failed in Nigeria and licenses revoked by the Central Bank of Nigeria between 1999 and 2006.

with good governance. For example, Beiner et al. (2006), Brown and Caylor (2006), Larcker et al. (2007), Henry (2008), Spellman and Watson (2009), Bauer et al (2010) etc. find positive link between corporate governance indices and performance using developed countries data. Similarly, Black et al. (2006a), Cheung et al. (2007), Black et al. (2010) etc are examples of emerging and developing economies based studies that find positive and significant relations between corporate governance indices with firm performance. Several studies also examine the impact of individual corporate governance mechanisms and similarly find positive association between corporate governance and firm performance. For example, Dahya and McConnell (2007); Black and Kim (2012) document for UK and Korean firms respectively that board independence is positively and significantly associated with firm performance. Mura (2007) finds a positive and significant association between the proportion of non-executive directors on board with performance of the UK firms and Liu et al. (2015) finds a positive and significant relationship between the presence of independent directors on the board and operating performance of the Chinese firms.

The main concern however is that, prior studies on the link between governance mechanisms and firm performance have been largely concentrated on the developed and emerging economies. Although a few studies are available (e.g. Ntim, 2015; Ntim, 2013; Munisi & Rowdoy, ,2013; Kajola, 2008; Sanda, Mikailu, Garba, 2005) however, not much research has been carried out with respect to impact of governance mechanisms on firm performance in the developing economies such as Sub-Sahara Africa. Arguably, some of the African countries including Nigeria appear to offer an interesting research context for carrying out investigation on the relationship between corporate governance mechanisms and firm financial performance, with high possibility of providing relatively different outcomes given the peculiarities of their institutional contexts.

1.2. Research Problems and Motivation

Resulting from review of the literature, the researcher identifies a few gaps/research problems in the literature. The need to carry out investigation on these problems is thus, the source of motivation for the study. These research problems are discussed as follows:

The problem of poor corporation performance

In recent years, majority of companies in Nigeria have not been performing well. The poor performance of these companies has often been attributed to weak corporate governance practices in the country (SEC Code, 2011). This in turn, is probably due to poor state of the firms' institutional environment which for a long time has remained inconducive for businesses to thrive. Notably, the endemic corruption in Nigeria that has overwhelmingly crippled its economy (Ahunwa, 2002; Angaye and Gwilliam, 2008; Adegbite, 2012; Adegbite, Amaechi and Amao, 2011) and as well the weak legal /judicial system, that accounts for the prevailing poor legal protection for the investors (Ahunwa, 2002; Adegbite 2012; Adegbite, Amaeshi and Nakajima, 2013). Aside these issues, there is also the possibility that, poor corporate governance practices in Nigeria is partly due to importation of foreign governance model without this having been properly modified to suite the Nigerian local realities (Angaye and Gwilliam, 2008; Adegbite, Amaeshi and Nakajima, 2013). This problem is most common with the developing countries and it high time the developing countries developed their own model of corporate governance. As Mulili and Wong (2011.p.14) who examine corporate governance practices in developing countries using Kenya universities as case study note '…. the ideals of good corporate governance have been adopted by developing countries since 1980s. Developing countries differ from developed countries in a wide variety of ways. Therefore, there is the need for developing countries to develop their own corporate governance models that consider the cultural, political and technological conditions found in each country'. Consequent to this problem of poor corporation performance,

many companies in Nigeria have wound up; while a huge number of them have been relocated to other neighbouring West African countries like Ghana, Gambia; Senegal etc. and the remaining firms in the country continue struggling for survival. There is the need for this problem to be investigated, which forms part of the whole motivation for conducting this research.

The cultural and ethnicity issues as they affect corporation performance

The Nigerian society is both a multi-cultural and ethnic society where gender and ethnicity respectively are issues (Jekayinfa, 2002). As part of their culture, the Nigerian people attach more importance and give recognition to men than women (Lasiele, 1999). The roles of female in the Nigerian society used to be confined to domestic related tasks and responsibilities. This reason explains why the males constitute a larger proportion of its entire work force and more importantly by default a larger percentage of work force in the corporate setting (Lasiele, 1999). There are as many as two hundred and fifty ethnics in Nigeria. Ethnicity is an important issue in the Nigerian society and this is one of the reasons why resource allocation by the Federal Government of Nigeria for instance is implemented on the basis of quota system[3]. Given that, gender and ethnicity respectively is an issue in the Nigeria context, the researcher is motivated to investigate the impacts which the appointment of the females and people of minority ethnic background on to the corporate boards (gender and ethnic minority diversity) may have on corporations' performance.

Inadequacy of corporate governance research

There is the issue of inadequate corporate governance research in the developing economies. For a long time, the research on corporate governance in developing countries has not received adequate attention, especially on the Sub-Saharan African region (Okeahalam, 2004;

[3] A quota system as a basis of resource allocation is often referred to as 'Federal Character'.

Ntim, 2009; Adegbite and Nakajima, 2010). Accounting research in the developing and emerging economies in general, including Nigeria has over the years been marginalised (Tsamenyi and Uddin, 2008). A substantial number of research studies that have been carried out on corporate governance and especially on the board independence-financial performance relationship have largely been based on developed economies data, while a relative handful have been on developing economies. Some improvements on the situation have been achieved over the last few decades (Haniffa & Cooke, 2002). Only recently has research begun to extend the investigation of this relationship to other economies outside the Anglo-America institutional context (Lin & Chuang, 2011; Zattoni et al., 2017). Mashayekhi and Bazas (2008) also share the view that, developing economies generally lack adequate studies on corporate governance and that, evidence of its impact on firm performance is relatively scarce. Munisi & Randoy (2013) who examine corporate governance and company performance across Sub-Sahara African countries also raises the issue of inadequacy of literature on corporate governance and firm performance in developing and emerging economies. As at present, studies on Nigerian corporate governance is insufficient, and with respect to available ones, just a few of them examine the impact of corporate governance on firm financial performance (e.g. Oyejide and Soyibo, 2001; Sanda, Mikailu and Garba, 2005; Kajola, 2008; Ehikioya, 2009; Tsegba and Herbert, 2013;) while majority epismologically comprises of conceptual based studies (e.g. Ahunwa, 2002; Okike, 2007; Adegbite and Nakajima, 2012; Akobo, 2016 etc).

It is worth mentioning also that, in order to prevent undue replication of work, this study, differs prior studies in several aspects. A study by Sanda, Mikailu and Garba (2005) is one of the few available literatures on Nigerian corporate governance and firm performance. This study acknowledges that there is scarcity of literature. However, major shortcomings of their study include the following. First, the period covered by their study (i.e. 1996-1999) was prior to the issue of the first Nigerian corporate governance code in 2003, and therefore does not address those

governance issues raised in the 2003 SEC code. Second, unlike this study that examines the impacts of corporate governance on firm performance using a 12-year panel data of the sampled firms, their study examines corporate governance and firm performance on just a 4-year panel data of the sampled firms. The period cover by their study is too short, which might result in making inferences differently. Third, the scope of investigation is limited in their study, whereas governance mechanisms are examined in a deeper and broader scope in this study. Finally, their study considers data from both financial and non-financial firms, whereas this study uses data only from non-financial firms.

Another Nigerian corporate governance study (Ujunwa, 2012) examines the impacts of corporate board characteristics of Nigerian firms (e.g. board gender, board ethnicity, board skills, board duality, etc.) on firm performance. The study covers only a limited scope, whereas the board structure being examined in this study covers wider aspects of the board structure (i.e. independence and diversity).

Adewuyi and Olowokere (2013) investigate the impacts of a newly released (2003) corporate governance code on the performance of Nigerian listed firms. Their study also raises the issue of a scarcity of literature on corporate governance and firm performance, not only in developing economies but specifically in Nigeria. The authors claim that their study can be regarded as the first to test the immediate impact of a new code of governance on Nigerian firms (Adewuyi and Olowokere, 2013 p.169). In their study, they categorise firms into those with good governance change, bad governance changes and with no change. They make a comparison between the financial performances of firms with good change with the financial performance of firms with bad change. The shortcoming of their study is that it relies heavily on the use of descriptive statistics in their analysis, as against the use of a more rigorous regression technique

for data analysis, a methodological approach common in corporate governance and firm performance literature as it is the case in this study.

Apart from the above-mentioned specific differences, the major differences between this study and other prior studies on corporate governance and the financial performance of Nigerian listed firms mainly lie in the focus of the study and research methodology adopted in analysing empirical data. First, this study examines both the board and ownership structures of a modern corporation; it investigates whether the presence of outsider majority on the boards of directors matters for firm performance, as well the representation or presence of the diverse directors on the board. Second, it has been observed that none of the prior Nigerian literature considers the endogeneity issue when estimating the relationships between corporate governance and firm performance. Corporate governance literature argues that a firm's board and ownership structure respectively are endogenously determined (Hermalin and Weisbach, 2003; Adams, Hermalin, and Weisbach, 2010). Unlike most of the Nigerian corporate governance studies, this study recognises the crucial issue of endogeneity and uses appropriate research techniques to address this likely problem in its analysis

Lack of consideration for institutional environment in the corporate governance investigations.

The firm's institutional environment refers to a set of formal and informal institutions that directly or indirectly exercise control over corporations. The institutional environment may have significant influence on the corporation's governance practices and this may shape performance outcome of the corporate governance mechanisms that have been put in place. The firm's external institutional environment varies from one country to another (Aguileria & Jackson, 2003; Ntim, 2009; Claessens and Yurtoglu, 2013) while the internal institutional environment may also differ from one firm to another (Ntim, 2009; Adegbite, and Nakajima, 2012). To the best of the researcher's knowledge, majority of prior studies on emerging markets rarely take into

consideration the influence of the institutional environment on firm-level corporate governance. Suggesting therefore that, such studies might have produced results that were different had the institutional context of the research been considered. Wijethilake, Ekanayake and Perera (2015 p.251) who examine the board involvement in corporate performance with evidence from a developing country are also in support of this view as they argue that '…...due to their different contextual characteristics, developing countries are likely to experience issues that may not be prevalent in developed countries'

The researcher realises the need for contextualisation of corporate governance investigation, which is also a motivating factor for this study. This aspect of corporate governance investigations is considered a research gap in the governance literature, especially with respect to developing economies. In carrying out this study therefore, attempt will be made to take into consideration the Nigerian institutional context, especially in model construction, data analysis, and interpretation of the results.

1.3.The research objectives and questions

The study seeks to explore the relationship between the internal corporate governance mechanisms and firm financial performance. Using a sample of 127 firms listed on Nigerian Stock Exchange from 2004 to 2015, the study seeks to achieve three main objectives stated as follows: First, to investigate what impact the presence of outsider directors has on firm performance. Two, to examine what impact the diversity of board membership has on firm performance. Third, to explore what effects does the firm ownership have on firm performance.

One of the important fiduciary duties of the board is monitoring of the management. Several pieces of existing research have investigated the effectiveness of board independence as governing mechanism for improving firm performance. However, the study's review of the

previous literature reveals mixed results and inconclusive evidence regarding the impact of board independence on performance, and that the research is still very much lacking as to whether this relationship is affected by firm ownership structure. The study therefore seeks to investigate three important questions: First, whether the presence of outsider directors on the corporate board has impact on firm performance? Two, whether ownership concentration affects the decisions on board independence? And whether the impact of board independence on performance is moderated by ownership concentration?

Much research on board is centred around the monitoring role of the executive and non-executive directors. However, not much research is available on their respective ownership roles. The study therefore seeks to carry out investigation on the performance impact of the executive directors' ownership and that of the non-executive directors' ownership. The study thus, makes attempt to investigate two main questions. First, the study will examine what impact the executive directors' ownership has on firm performance. Second, what impact does the non-executive directors' ownership has on firm performance.

A concentrated ownership is the norm in the global developing and emerging economies such as Nigeria, Ghana, South Africa etc. (La Porta, Lopez-De-Silanes & Shleifer, 1999) In contrast, the dispersed ownership structure is most prevalent in the developed economies such as the UK, US, Canada etc., where the nature of agency conflict is that, between the agent and principal. Most of prior literature on ownership focuses more on this type of conflict of interests (i.e. the agent-principal conflicts). Whereas the principal-principal agency type of conflict is more pronounced in the developing economies, where the minority investors' protection tends to be weak (Claessens and Yurtoglu, 2013). The lack of adequate protection, provides the opportunity for large equity shares' owners to expropriate firm's resources at the expense of the minority shareholders, which consequently often results to poor performance. Although, the ownership

structure of firms in the emerging economies is gradually moving away from concentrated to dispersed ownership structure, nevertheless, the concentrated ownership remains predominant in the emerging markets. Given such a shift, there is the need for more research on whether a concentrated ownership structure still remain a relevant governance mechanism for improving firm performance. The study therefore, seeks to investigate research question such as: whether large ownership (e.g. Large Institutional and Large Non-institutional ownership) enhances the firm performance.

Nigeria is a multi-cultural, ethnic and patriarchal society where gender and ethnicity are issues socially, politically and economically. It is a society where the male dominance over that of the female is prevalent. The resource allocation for instance by the federal government of Nigeria is shared among the citizenry based on ethnicity. Therefore, investigating the effects of the gender and ethnicity on firm performance becomes a relevant aspect of the corporate governance research. A review of the literature also reveals that most of the prior research that examines the relationship between gender and/or ethnic diversity and firm performance focuses more on the agency role of women and ethnic directors on corporate boards. Only a few – to the best of the researcher's knowledge – examine in-depth the resource roles of diverse directors on the boards. These roles are found to be theoretically and practically different. For example, while the board monitors the management, it also functions as a link between the firm and the external environment, and ensures that the firm responds to significant changes in its external environment (e.g. by altering the composition of the board). To further address this gap in the literature, this study examines not only the agency role but as well the resource role of the female and minority ethnic origin directors sitting on corporate boards, by taking evidence from public companies that are listed on the Nigerian Stock Exchange. The study investigates two major research questions: First, whether greater diversity enhances the firm performance? and second, whether the females and ethnic minority directors sitting on Nigerian corporate boards are valued members of the board?

1.4.Context of the study

Corporate governance in Nigeria is still developing and yet to reach an advanced stage of its development. A formal code of corporate governance was first introduced in 2003 and revised in 2011, the provisions of which must either be complied with by every company that is listed on the Nigerian Stock Exchange (NSE) or explained in the event of non-compliance. The Nigerian corporate governance principles like other commonwealth nations are tailored to those of the UK (Okike, 2007; Angaye and Gwilliam, 2008; Adegbite and Nakajima, 2010). However, due to peculiarities of the Nigerian institutional contexts as distinct from those of the UK, the performance outcomes of corporate governance in Nigeria are most likely to be different from those reported by the UK based literature. Given its institutional contexts therefore, the Nigerian economy is faced with some peculiar corporate governance issues and each of which requires investigation. These problems include: poor corporation performance; corporations' failure, that is attributable to weak corporate governance; lack of institutional support for corporate organizations; endemic corruption; weak legal/judicial system; ethnicity; gender inequality; inconclusive privatisation and commercialisation of the Nigerian companies especially as it affects equity shares ownership; poor state of infrastructures etc.

The data used in the study comprise hand-collected panel dataset of 130 listed companies on the Nigerian Stock Exchange, over a twelve-year period (2004-2015). The corporate governance data are collected from the annual reports of companies while financial data are downloaded from data bases such as: NSE (Nigerian Stock Exchange) data base, Compustat data base, PI Investigator data base and Data Stream data base. More detail about data and source are in section 5.3.

1.5. Contributions of the study

The study seeks to address the research questions stated in section 1.3. It provides several new contributions and as well makes extensions to extant corporate governance literature, especially in the emerging markets. The theoretical implications of its findings would be useful to academics for further future research while policy implications of findings would be of immense use to policy makers in the government, stock market regulators, as well as corporate boards and investors. The study extends research on the effectiveness of internal governance mechanisms such as independent board, gender and ethnic minority diversity, and outsider director ownership in improving the firm performance. The findings of the study do suggest among others, the need for contextualization of corporate governance investigations and the use of multi-theoretical approach for analysing research outcomes. In other words, its findings suggest the need for the developing and emerging economies based researchers to begin to adopt a more institutionally embedded and holistic governance framework for analysing their research, given different institutional environment in each of these economies. The contributions of the study are discussed in more detail in the chapter nine.

1.6. Outline of the Study

The study contains nine chapters. Chapter one presents the introductory aspects of the study. The chapter discusses the research problems and the motivation for the study. It provides the research objectives and questions, the contributions of the study and context of the study. Chapter two presents a review of corporate governance in Nigeria. It provides discussions on the history and development of corporate governance in Nigeria; the Nigerian corporate governance external and internal environment that may shape corporate governance practices. The chapter also contains discussions on major challenges that face corporate governance practice in Nigeria. Chapter three contains discussion on theoretical framework used to guide the understanding of the

study. Chapter four reviews the previous literature and development of hypothesis. It contains a review of the board and ownership structures respectively. Chapter five contains discussion of the research methodologies, which includes the research methods and model specifications. Chapter six contains the empirical chapter on board independence and firm performance. Chapter seven gives an empirical analysis of ownership structure and firm performance. Chapter eight contains empirical analysis on gender and ethnic minority diversity and firm performance. Chapter nine presents the summary and conclusion.

CHAPTER TWO: CORPORATE GOVERNANCE IN NIGERIA.

2.1. Introduction

The development of corporate governance in Nigeria is discussed in this section in four periodic contexts: the pre-1990 era; the 1990 to 2003 period; the 2003 to 2011 era; and post 2011 period.

In the pre-1990 era, the main statute that governed corporations in Nigeria was the Companies Act 1968. This statute was modelled after the Companies Act 1948 of the United Kingdom. This enactment contained many statutory provisions that guide the running of companies by the board of directors. However, due to numerous criticisms from the stakeholders, the 1968 Companies Act was abrogated and replaced by the Companies and Allied Matters Decree No 1, of 1990. Later, with some modifications over the years, this statute which regulates all the companies in Nigeria changed in 2004 to the Companies and Allied Matters Act, Cap. C20, Laws of the Federation of Nigeria, 2004.

The period from 1990 to 2003 witnessed some corporate governance challenges around the world, which brought the issue of corporate governance to the fore[4]. It was the period many countries around the world started the review of their corporate governance practices. Some began to issue corporate governance codes to address issues that were previously neither specifically addressed nor adequately dealt with in their respective companies' statutes.

The first and foremost corporate governance code in Nigeria was the Code of Corporate Governance for Banks and Other Financial Institutions, issued by the Bankers' Committee in August 2003 in response to the financial crises in the Nigerian financial institutions in the early

[4] The collapse of Enron, WorldCom and other major corporations around the globe in the early 2000s brought corporate governance issues to the front burner around the globe.

1990s. The crisis was attributed to poor corporate governance in virtually all known instances of financial sector distress (SEC code 2011). The shortcomings of the code are that it was issued by a voluntary association of the Chief Executive of the Nigerian banks, and that it was applicable only to all banks and other financial institutions operating in Nigeria as at the time of its issue.

In the period 2003 to 2011, the Security and Exchange Commission in collaboration with the Corporate Affairs Commission issued the code of Best Practices on Corporate Governance for all listed companies on the Nigerian Stock Exchange (NSE). The code was the outcome of the work of a 17- member committee, headed by Mr Atedo Peterside. The membership was carefully selected, cutting across all sectors of the economy and included the members of professional bodies, organised private sector and regulatory agencies. Their term of reference was to identify weakness in the then corporate governance practices in Nigeria and come up with ways to improve this. The period witnessed the issue of SEC code (2003) on corporate governance.

However, because of the numerous changes in the corporate world which the provisions of the 2003 corporate governance code could no longer adequately address, and the amendment by SEC was not forthcoming several years after this, some regulators of specific sectors began issuing industry-specific corporate governance codes. For example, in 2006, having completed the consolidation of the Nigerian banks, the Central Bank of Nigeria issued the code of corporate governance for banks in Nigeria. Similarly, in 2008, following the reforms in the pension sector which gave rise to greater private sector involvement in pension fund management, the National Pension Commission (PENCOM) issued the Code of Corporate Governance for Licensed Pension Operators (i.e. PENCOM code, 2008). In a similar manner, the National Insurance Commission (NAICOM), the regulator of the insurance business, issued in 2009 the code of corporate governance for the insurance industry in Nigeria. These three industry-specific corporate governance codes helped to address those corporate governance issues that were peculiar to each

of these sectors at the time of issue which the 2003 SEC code however failed to address (Corporate Professional, 2013).

In addition to the above inadequacies, the 2003 SEC code provisions were also deficient in some other contemporary corporate governance issues, including: independent directors; board committee critical for corporate governance; directors' appointment, tenure, remuneration and evaluation; the independence of external auditors; whistle-blowing procedures; sustainability issues; transparency issues and general disclosure. These apparently called for the need to update the 2003 SEC Code. Therefore, in response to such a need the Security and Exchange Commission constituted a national committee for the review of the 2003 SEC Code, headed by Mr M.B. Mahmoud. The mandate was to address the weaknesses in the 2003 SEC Code, and improve the mechanisms for its enforceability. The committee is also mandated to identify constraints to good corporate governance and recommend ways by which greater compliance could be accomplished, and more importantly to align the Corporate Governance Code with international best practice. The review by the committee began in 2008 and by 2009, the committee submitted its reports together with draft revised code of corporate governance to the SEC. Having had consultations with other regulating bodies, the 2011 SEC code was released to replace the 2003 SEC code, with commencement date of April 1, 2011. The code is expected to be the minimum standard to be observed by all public companies in Nigeria.

As at 2011 and to date, there were four regulators[5] actively involved in ensuring good corporate governance practices in Nigeria and each of these regulators issued a corporate governance code. Three of these codes are industry-specific, meaning that the codes are applicable only to companies in the sector over which the commission concerned has authority, whereas the

[5] These regulators are: The Central Bank of Nigeria (CBN), the National Pension Commission, the National Insurance Commission and Security and Exchange Commission.

corporate governance code issued by the SEC is applicable to all public companies registered in Nigeria irrespective of the sector in which those companies operate (SEC code, 2011).

After the 2011 SEC code on corporate governance became operational, the Federal Government of Nigeria enacted the Financial Reporting Council of Nigeria Act, 2011. This statute gives the Financial Reporting Council an express jurisdiction over corporate governance. Sections 23(g) and 45 permit the establishment of a Directorate of Corporate Governance for the Financial Reporting Council of Nigeria. Sections 50 and 51 stipulate the functions of the Directorate. Some of these include the following: to develop principles and practice of corporate governance; promote the highest standards of corporate governance; promote public awareness about corporate governance principles and practices; act as the national coordinating body responsible for all matters pertaining to corporate governance etc. The Directorate of Corporate Governance of the Financial Reporting Council of Nigeria is also empowered to organize and promote workshops, seminars and training in corporate governance issues etc. However, the impact which the Financial Reporting Council of Nigeria has on corporate government practices in Nigeria is yet to be felt (Corporate Professional, 2013).

2.2. **The Nigerian Corporate Governance Environment**

Corporate governance environment in this context refers to a set of formal and informal institutions that exercise control over corporations and the influence of which shape the way corporation is directed and controlled. In the developing and emerging economies, certain institutions (formal) which should normally support corporate governance are either not operating as intended, or inefficient where they do; even certain institutions may altogether be absent (CIPE, 2002). Consequently, corporate governance practices in these economies receive relatively little or no institutional support (CIPE, 2002; Peng, 2004; Claessen and Yurtoglu, 2013). The Nigerian

corporate governance landscape can be classified into two categories (i.e. internal and external environment).

2.2.1. The Nigerian External Corporate Governance Environment

The external corporate governance environment comprises of those institutions that exercise control over the operations of companies from the outside (Ntim, 2009; Adegbite and Nakajima, 2012). They consist of major financial regulatory and law enforcement bodies. These institutions usually have responsibility for the formulation and implementation policies and rules; they are as well responsible for the enforcement of statutory laws and codes of conducts (Ntim, 2009). The enforcement of these laws and codes or lack it inevitably has impacts on corporate governance practices and thus may shape the corporate governance performance outcomes. Some of these institutional bodies are discussed below:

The Federal Ministry of Finance

The Federal Ministry of Finance is the government body that manages the finances of the Federal Government of Nigeria. Its responsibility includes controlling and monitoring the federal government revenues and expenditures; formulating the monetary and fiscal policies for the nation; preparing and managing the national budget etc. The nation's monetary and fiscal policies, as well as annual national budget do directly or indirectly affect the way corporations in an economy are run and controlled. The Ministry of Finance is headed by the minister of finance who is a member of the federal cabinet and assisted by a permanent secretary in the Federal Ministry of Finance. The Federal Ministry of Finance has several parastatals and governmental agencies under its control which are responsible for the implementation of these economic policies. They include the Securities and Exchange Commission (see below); Nigerian Deposit and Insurance Corporation (see below); Federal Inland Revenue Service; National Insurance Commission; Nigerian Customs Service; Nigerian Export Import Bank (NEXIM) etc. The

implementation of these policies will directly or indirectly have influence on companies' operations and thus ways by which they are run and controlled.

The Security and Exchange Commission

The Security and Exchange Commission, is the main regulatory institution of the Nigerian capital market. SEC originated from the ad hoc, non-statutory Capital Issues Committee established in 1962 as an arm of the Central Bank of Nigeria but now chartered by the Investment and Security Act (1999; 2007). The Act grants the commission the general and specific rule making authority. The rules and regulations guide the conduct of participants in the capital market, and make them be aware of what conduct is expected of them, and which conduct will be sanctioned and those that can promote fairness and equality of treatment among the market operators and participants. These rules and regulations govern securities exchanges, capital market operations, securities offered for sale or subscription, mergers, acquisitions and combinations etc. In addition to corporate governance code that all publicly quoted companies in Nigeria must comply with or explain in the event of non-compliance, the SEC also issues the codes of conduct for the capital market operators and members (e.g. Anti-Monetary Laundering/Combating Financing of Terrorisms (AML/CFT Regulations for Capital Market Operators). The Nigerian SEC issues the code of corporate governance that companies must complied with or provide explanation where there is non-complince.

The Central Bank of Nigeria

The Central Bank of Nigeria (CBN), was established by the CBN Act of 1958 and is the apex monetary authority of nation. The major regulatory objectives of the Central Bank include the promotion of monetary stability and sound financial environment, acting as a banker of last resort and financial adviser to the federal government. It regulates all banks and play a major role

in the implementation of the monetary and fiscal policies for the nation. The federal government of Nigeria through the central bank is actively involved in building the nation's money and equity centres, creating securities' regulatory boards and introducing treasury instruments into the capital market. The CBN regulations on certain issues like the bank interests' rates; buying and selling of foreign exchange; companies' foreign transactions (e.g. the opening of letters of credit etc.), including regulations on raw materials' importations and finished goods/services' exportations must be complied with by all companies. All these in one way or the other influence the way companies are run and controlled.

The Nigerian Stock Exchange (NSE)

The NSE is responsible for ensuring orderly and equitable dealings in securities and protection of the capital market against insider trading abuses. It issues out the guidelines, rules and regulations known as 'The Rules of the Exchange' that govern not only the dealing members (e.g. dealers and brokers) but as well other stakeholders such as the issuers (i.e. companies) and investors, all which must be complied with. These rules are subject to provisions of the Investments and Security Act (ISA) 2007 and they cover a wide range of issues such as: the general and capital requirements before becoming a dealer member, the trading and exchange operations, clearing and settlement, members conduct, disciplinary procedures for members etc. all which aimed at ensuring the investors' protection and prevention of insider trading. The NSE is overseen by Securities Exchange Commission (SEC). The role of Nigerian Stock Exchange (NSE) is expected to have significant impacts on the quality standard of corporate governance practices in Nigeria.

The Corporate Affairs Commission

The Corporate Affairs Commission (CAC) was established consequent to issue of Companies and Allied Matters Act 1990. CAC is the only government agency that is responsible for the incorporation of companies (private, public, and those limited by guarantee); registration

of business names; registration of incorporated trustees; conducting searches; issuance of certified true copies of filed documents; registration of share capital increases; processing the statutory fillings of annual returns; and processing alterations to the memo and articles of association. It also has the responsibility for monitoring compliance by companies with the Companies and Allied Matters Act, the main statutory regulations for companies. The commission imposes fines penalty on companies that default in respect of annual returns filing requirements (Companies Regulations, 2012). The extent of compliance or non-compliance by companies with the CAC regulations will invariably impact on corporate governance practices.

The Nigerian Deposit and Insurance Commission

The Nigerian Deposit Insurance Corporation (NDIC) is a parastatal that operates under the Nigeria Deposit Insurance Corporation Act (1990); it is a member of the Financial Reporting Council of Nigeria. The corporation is charged with the responsibility of protecting the nations' financial system, especially the banking system and microfinance institutions from instability occasioned by runs and loss of depositors' confidence. The NDIC advises the Central Bank of Nigeria (CBN) on matters relating to the liquidation of distressed banks and manages distressed banks' assets until they are completely liquidated. The NDIC role complements the regulatory and supervisory role of the Central Bank of Nigeria (CBN) in providing stability of the nation's financial system. For example, the collapse or failure of just one bank may cause systemic failure for the whole banking industry in an economy. As companies' effectiveness in enhancing the shareholders wealth, among other factors also depends on the state of nation's financial and economic systems, it is expected that the NDIC role would complement the corporate governance' efforts being channelled towards the investors' funds protection. NDIC reports to the Federal Ministry of Finance.

The Ministry of Women Affairs

As mentioned in section 1.2, gender inequality is an issue in the Nigerian nation. The activities of the ministry of women affairs and social development is one of the potent institutional mechanisms that addresses this gender imbalance through women empowerment. In line with the United Nations' advocacy for gender parity worldwide, the Nigerian government over the last three decades has put in place and implemented policies that ensure women protection against abuses and promote their empowerment.

In line with this spirit, the government of Nigeria created the Federal Ministry of Women Affairs and Social Development in 1989 in response to United Nations agreement that seeks the establishment of institutional mechanisms for the advancement of women and women matters. This ministry is headed by a minister who is appointed by the president of the Federal Republic of Nigeria. The mandate of the ministry is to advise government on gender issues, initiate policy guidelines on and lead the process of gender equality in the Nigerian nation. Its vision is to help build a Nigerian society that guarantees equal access to social, economic and wealth creation opportunities to all in the national development process irrespective of gender (The Vanguard, 2018).

In Nigeria, women are said to constitute about 70 per cent of the poor (Lasiele, 1999). This has brought to lime light the need to empower women by enhancing their capacity to participate in the nation's economic, social, political and cultural activities. The means of achieving empowerment may take different forms such as: the implementation of the United Nations conventions that requires the elimination of all forms of discrimination against women; mainstreaming women's concerns and views in major policies; making legislation for the abolition of all forms of traditional practices that are harmful to women; promoting women access to

microfinance and other poverty alleviation strategies; encouraging women's education at basic and tertiary levels.

One of the mechanisms that has proved effective for the women empowerment in Nigeria is education. In the last decade, there has been a tremendous improvement in the females' enrolment in the nations' higher educational institutions in Nigeria. The percentage of females that acquire higher degrees has been rising astronomically in the last decade (Lasiele, 1999). The phenomenon is expected to largely help in building the nation's pool of human capital and enhance its development. The women empowerment over time is hoped to enhance the firms' human capital pool and thus their capacities as more females with higher education are appointed to top managerial positions in the firm. The involvement of the ministry of women affairs no doubt has influence over corporate governance practices especially those which relate to the females' appointment to the corporate boards.

2.2.2. The Nigerian Internal Corporate Governance Environment

Unlike the external corporate governance environment as discussed above, the firms' internal corporate governance environment comprises of the institutions[6] that influence the way in which companies are governed from within (Ntim, 2009; Adegbite and Nakajima, 2012). They include both the statutory and voluntary corporate laws and the codes of conduct with which the companies listed on Nigerian Stock Exchange are required to comply. Some of these are discussed below:

The Companies and Allied Matters Act (CAMA) 2004

The Companies and Allied Matters Act (CAMA) 2004 is the main laws of the Federal Republic of Nigeria, consisting of the statutory regulations that guide all aspects of a company that

[6] Institutions may be either formal or informal (North, 1990). Formal institutions are codified rules, such as laws and regulations. Informal institutions are intangible values, customs and traditions (Zattoni et.al., 2017)

is listed on Nigerian Stock Exchange from cradle to grave. The Act coverage areas include but not limited to matters such as: the incorporation of a company; membership of the company; shares capital; meetings and proceedings of companies; winding-up companies etc. Some of the provisions of the Act as far as they may affect corporate governance are discussed below.

The Directors of a company

The Act requires that every company shall have at least two directors (Section 246(1)). The directors of a company are persons duly appointed by the company or direct and manage the business of the company. The members of the company at the annual general meeting shall have power to re-elect or reject directors and appoint new ones. It provides that the board of directors shall have power to appoint new directors to fill any casual vacancy arising out of death, resignation, retirement or removal. The Act provides that any person appointed as a director of a public company and who is 70 or more years old shall disclose this fact to members at the general meeting (Section 252 (1)). The Act forbids an insolvent person to act as director. The Act requires further that unless the articles provide otherwise, at the annual general meeting of the company, all the directors shall retire from office and at the annual general meeting in every subsequent year one-third of the directors shall retire from office. The Act states that, unless the articles otherwise provide, the quorum necessary for the transaction of the business of directors shall be 2 where there are not more than 6 directors, but where there are more than 6 directors, the quorum shall be one-third of the number of directors (Section 264 (1)). The remuneration of the directors shall from time to time be determined by the company in general meeting (Section 267 (2)). Where remuneration has been fixed by the articles, it shall be alterable only by a special resolution. Every company shall keep a register showing each director's interest in the shares or debentures of the company. A director shall owe fiduciary relationship with the company.

Protection of Minority against illegal and oppressive conduct

The CAMA 2004 contains several provisions aimed at protecting the interest of minority in the company at different situations. Some of these circumstances are discussed as follows: Where an irregularity has been committed in the course of a company's affairs or any wrong has been done to the company, the Act provides that only the company can sue to remedy that wrong and only the company can ratify the irregular conduct (Section 299). The Act provides that the court on the application of any member, may by injunction or declaration restrain the company from entering into any transaction which is illegal or ultra vires or where a fraud is committed on either the company or minority shareholder and the directors fail to take appropriate actions to redress the wrong done (Section 300) . It provides that an application by a member of the company, director or creditor or any person which in the court's discretion is appropriate, for relief may be made to the court on the ground that the affairs of the company are being conducted in an illegal or oppressive manner. The commission shall appoint one or more competent inspectors to investigate the affairs of a company and to report on them in such manner as it directs, if the court by order declares that its affairs ought to be so investigated (Sections 310 - 311).

Directors' Report

The Companies and Allied Matters Act requires that every company shall prepare for each year a report by the directors (Section 369 (1)). This report shall contain a fair view of the development of the business of the company and its subsidiary during the year and of their position at the end of it. The report shall state the amount (if any) which they recommend for dividend payment and the amount (if any) which they propose to carry to reserves. The directors' report shall state the names of the persons who, at any time during the year, were directors of the company and the financial activities of the company and its subsidiaries in the course of the year and any significant change in those activities in the year (Section 369 (2)). The report shall state matters relating to the employment, training and advancement of disabled persons, the health, safety and

welfare at work of the employees of the company and the involvement of employees in the affairs, policy and performance of the company among others matters (Section 369(5)).

Annual Returns

The Companies and Allied Matters Act (CAMA) 2004 (Section 370) requires that every company shall, once at least in every year, make and deliver to the Corporate Affairs Commission an annual return in the form, and containing the matters specified in the Act as mentioned below: The annual return by a company having shares other than a small company shall contain with respect to the registered office of the company, registers of members and debenture holders, shares and debentures, indebtedness, past and present members and directors and secretary. The said return shall be in the form set out in Part II of schedule 8 to the Act. The annual return by a small company shall contain the matters specified in Part 1 of Schedule 9 to the Act.

The annual return shall be completed within 42 days after the annual general meetings for the year and the company shall forthwith forward to the Commission a copy signed both by a director and by the company's secretary (Section 374). There shall be annexed to the annual return a written copy, certified both by a director and by the secretary of the company to be a true copy, of every balance sheet and profit and loss account laid before the company in general meeting held in the year to which the return relates (Section 375 (1)). Also, to be annexed is a copy certified of the auditors on, and of the report of the directors accompanying, each such balance sheets. If a company required to comply with any of the above provisions fails to do so, the company and every director or officer of the company who is in default shall be guilty of an offence and liable to a fine of 1,000 in the case of a public company and 100 in the case of private company (Section 378 (1)).

The Code of Corporate Governance for Public Companies

The corporate failure in the early 1990s in Nigeria was attributed to weak corporate governance. In response to this, a 17-member committee was set up to examine the corporate governance practices in Nigeria and the outcome was the 2003 Code of Corporate Governance. Prior to the 2003 SEC code, the Companies and Allied Matters Decree (1990)[7] was the statute for regulating companies. Subsequently after the issue, the 2003 SEC code became inadequate to address the growing global corporate governance issues as they affect Nigeria and those other issues not previously addressed in the code. Therefore, due to an increasing demand for a more relevant governance code, the SEC reviewed the 2003 code and issued an updated version in the year 2011 (i.e. the 2011 Corporate Governance Code).

The 2011 Code of Corporate Governance seeks to ensure the highest standard of transparency, accountability and good governance without unduly inhibiting the enterprise and innovation. The code is applicable to all public companies whose securities are listed on a recognised securities exchange in Nigeria, all companies seeking to raise funds from the capital market and all other public companies. As the code stipulates "the responsibility for ensuring compliance with or observance of the principles and provisions of this code is primarily with the board of directors. However, shareholders, especially institutional shareholders, are expected to familiarise themselves with the letter and spirit of the code and encourage or whenever necessary, demand compliance by their companies" SEC Code 2011. p.6. In their annual reports to the SEC, companies are required to indicate their level of compliance with the code. Some of the provisions of the code are reviewed as follows:

Size, Composition and Structure of the board

[7] The Companies and Allied Matters Decree (1990) is now called the Companies and Allied Matters Act (2004)

The Nigerian corporate governance code requires that the membership of the board should not be less than five and that it should comprise of a mix of executive and non-executive directors, headed by a chairman. Furthermore, the code provides that the board should be of a sufficient size in relation to the scale and complexity of the company's operations. It requires that the board should be composed in such a way as to ensure diversity of experience without compromising independence, compatibility, integrity and availability of members to attend meetings (SEC code, 2011.p9). The code stipulates that the board should be independent of the management so to be able to carry out its oversight functions in an objective and effective way.

Officers on the board of directors

The officers of the board comprise of the chairman and the chief executive officer. The code requires that the chairman of the board should be a non-executive director. The board's chairman is primarily responsible for ensuring that the board operates effectively and achieves the company's strategic objectives. The Chief Executive Officer (CEO) has primary responsibility for the day-to-day operations of the company together with his management team. In practice, the CEO is usually the managing director but sometimes a company may have a CEO in lieu of managing director. The Nigerian corporate governance code requires that 'for all public companies with listed securities, the position of the board's Chairman and Chief Executive Officer shall be separated and held by different individuals' (SEC code, 2011 p.10). This according to the code is to prevent over-concentration of power in one individual which may undermine the checks and balances that the board requires in performing its functions.

Appointment to the board

The code provides that the board of a public company in Nigeria should develop a written, clearly defined, formal and transparent procedure for appointing directors to the board (SEC code, 2011 p.23). It further provides that the criteria for the selection of directors should be written and

defined to reflect the existing board's strengths and weaknesses, required skills and experience, current age range and gender composition. The code provides that a section of the company's annual report should state the processes used for all board appointments.

Retirement from the board

The code provides all directors should submit themselves for re-election at regular intervals of at least once every three years (SEC code, 2011p.29). Although the code does not specify the maximum number of years a director may serve on the board, the common practice in Nigeria in this regard is that, the directors retire in rotation and if eligible presents himself for re-election. Usually the directors automatically retire at the age of 70 years but if willing may be re-elected at the annual general meeting. The code recommends that non-executive directors of public companies in Nigeria should serve for reasonable periods on the board (SEC code, 2011 p.29). The code suggests that it is necessary to reinforce the board by continually injecting new energy, fresh ideas and perspectives. It recommends that the board should ensure the periodic appointment of new directors in replacement of the existing non-executive directors.

Independent directors

The code provides that, an independent director shall be a non-executive director, who is not a substantial shareholder of the company and shall not be a representative of a shareholder that can control or significantly influence management. (SEC code, 2011p.14). An independent director shall be free of any relationship with the company or its management that may impair or appear to impair his ability to make independent judgments. The code requires that every public company shall have a minimum of one independent director on is board (SEC code 2011 p.16)

Board Committees

The code requires that the board shall determine the extent to which its duties and responsibilities shall be undertaken through committees. According to the code, the board shall

determine the size and composition of such committees. It provides that the board shall ensure that the committee comprises of people with the relevant skills and competences and that its members are able to have adequate commitment to committee's work. It provides that it is the responsibility of the board to facilitate the effectiveness of the committees in discharging their duties. Therefore, the board shall ensure that the committees are provided with all necessary information and may seek independent professional advice at the company's expense subject to the board's approval. Only directors can be members of board committee, although senior management may be in attendance (SEC code, 2011 p.19)

External Audit

To safeguard the integrity of the external audit process and guarantee the independence of the statutory auditors, the code recommends that public companies should rotate both the audit firms and audit partners (SEC code, 2011 p.43). External audit firms should not be retained longer than a period of 10 years and may be reappointed perhaps 7 years after their disengagement. Some of the large public companies have begun to adopt this policy.

Whistleblowing policy

The code recommends that public companies should have a whistle-blowing policy which should be known to the employees and other stakeholders (SEC code, 2011 p.42). The board has responsibility for whistle-blowing policy implementation and creating a mechanism for reporting illegal or unethical behaviour. Not many companies have started implementing the whistle-blowing policy, with just a few of the listed firms beginning implementation about two years ago.

The Articles and Memorandum of Association

The Articles of Association is a document that contains the purpose of the company as well clearly defines the duties and responsibilities of its members. A Memorandum of Association (MOA) is a legal document prepared in the formation and registration process of a limited liability company. These documents constitute the most important governing documents of any business. The documents serve as the company's constitution, as they define the responsibilities of the directors, the kind of business being undertaken, the means by which the shareholders exert control over the board of directors etc. These documents contain various provisions that guide the firm's conduct with the outside world and within the company itself which may shape the performance outcome of the firm's corporate governance. In Nigeria, these documents are required for business registration with the Corporate Affairs Commission.

The Codes of Conduct for Shareholders' Associations

The Code of conduct for Shareholders Association requires that, such association shall comprise of a body not less than 50 shareholders of public companies. The association is normally established for the purpose of advancing the interest of its members and influencing the standard of corporate governance to enhance the shareholders' value. The membership of such association which shall be open to all shareholders on a voluntary basis, must be registered with the Corporate Affairs Commission and with not less than 5 persons as trustees.

This Code of Conduct for Shareholders Association seeks to ensure the highest standard of conduct amongst its members and the companies with whom they interact as bona fide shareholders. The code thus, focuses at "ensuring that, association members uphold high ethical standards and make positive contributions by means of ensuring that the affairs of public companies are run in an ethical and transparent manner and in compliance with the Code of Corporate Governance for public companies" (CCSA, 2007. p.1.) The Code emphasises the need for the Shareholders' Association to promote good governance of public companies and strive to

influence corporate and government policies that seek to encourage investment and advance the interest of shareholders and optimize shareholders' value.

2.3. Corporate Governance Challenges in Nigeria

Corporate governance in Nigeria is faced with too many challenges, but the two prominent of these are: the corruption epidemy and weak legal/judicial system.

2.3.1. The corruption epidemy

A major devastating growing issue that affects the Nigerian economy is corruption. Corruption adversely affects the public finances, business investments, and the nation's general standard of living. The act of corruption is perpetrated in every sector of the Nigerian economy, and every nook and corner of Nigerian society whether big or large and at every level. Corruption therefore remains the greatest challenge in the Nigerian economy in the 21st century.

What is corruption?

Many define corruption differently. Corruption is defined as those acts involving illegal payments and transactions including: bribes, embezzlement and money laundering (PWHC, 2016). It is an illegitimate use of power or position for private gains (Morris, 1991). It involves receiving or giving a bribe to an official with the intent to cover the truth (Mike, 2017). The Transparency International's Corruption Index (CPI) classifies corruption into three categories: grand corruption – that is, those "acts committed at a high level of government that distort policies or the central functioning of the state, enabling leaders to benefit at the expense of the public good"; petty corruption – this includes "everyday abuse of entrusted power by low-and mid-level public officials in their interactions with ordinary citizens…often trying to access basic public goods and services"; lastly, political corruption – this involves the "manipulation of policies, institutions and rules of procedure in the allocation of resources and financing by political decision makers, who abuse their position to sustain their power, status and wealth" (Transparency International, 2017).

The level of corrupt practice is very high in Nigeria, in both the public and private sectors of the economy respectively. Even in international terms, Nigeria's image has been dented with the corruption 'virus'. In 2000, Transparency International (TI) carried out a survey on corruption in 90 countries of the world. The findings showed that Nigeria was the most corrupt nation, as it ranked 90th in terms of transparency. In 2001, Nigeria ranked just behind Bangladesh as the second-most corrupt nation in the world. In 2002, the TI report ranked Nigeria again as the second most corrupt, as the report showed Nigeria being in the 101st position out of 102 countries surveyed. In 2003, the Nigerian ranking remained the same, as there was no improvement. In 2004, 146 countries were surveyed. The TI ranking showed a little improvement over Bangladesh and Haiti as Nigeria ranked the third most corrupt country in the world. In 2006, 163 countries were surveyed, and Nigeria was ranked the 21st most corrupt country. In 2007, the Transparency International survey ranked Nigeria as the 33rd most corrupt country in the world. Nigeria's position on transparency table was 147 out of 180 countries. In 2013, Nigeria was at position 144 out of 177 countries surveyed. Thus, Nigeria was ranked the 33rd most corrupt country in the world in that year. In 2014, the IT surveyed 174 countries and ranked Nigeria the 38th most corrupt country, as Nigeria was number 136 out of 174 countries on the table. In 2015, the TI surveyed 168 countries out of which Nigeria was number 136 on the table. Nigeria was ranked the 32nd most corrupt country. Despite the anti-corruption crusade led by the present administration in Nigeria, in 2016, Nigeria was still ranked the 40th most corrupt country in the world (Uzochukwu, 2013). The corrupt practices in Nigeria take various forms. These are neither limited to corrupt practices perpetrated in the political scene nor in the public sector. They take place everywhere and in virtually every sector of the economy. Corruption in Nigeria can be classified into the following categories.

Political Corruption

Corruption in the political system in Nigeria is the most significant instance of corruption, ranging from embezzlement, bribery, election rigging, looting the treasury, and money laundering. In all the legislature arms of government (i.e. Senate and House of Representatives), corruption is the norm. Many of the former leaders looted the treasury and kept the loot in foreign banks; this act has helped those countries to develop their own economies with the stolen wealth. There have been many instances of financial recklessness, with public officers and political leaders squandering the government's money and resources. Some examples follow.

After General Sanni Abacha's (a former Nigerian president) death, it was discovered that he looted as much as $3 billion, which got stacked in a Swiss bank (Uzochukwu, 2013). The Federal Government of Nigeria has been recovering the money in tranches from the Swiss government. As at December 2016, the Federal Government of Nigeria was expecting repatriation from the Abacha loots of about $320million. The Federal government planned to use this money to part-finance the 2017 budget (The Punch, 2016). In December 2016, the EFCC launched a manhunt for an accomplice of the former Nigerian President's wife as part of the commission's investigation on the sum of N9 billion found in her bank accounts.

In December 2016, the Economic and Financial Crime Commission (EFCC) filed a case in the High Court regarding a criminal diversion of about $1.6billion alleged to be part of the proceeds of sales of petroleum products belonging to the Federal Government of Nigeria against a former Petroleum Minister, along with others (Sunday Punch, 2016). The political class routinely do whatever it takes to rig elections. It was therefore no surprise that a N23 billion bribe was collected by the INEC officials towards rigging the 2015 presidential election. The EFCC conducted an investigation into the N23 billion bribe offered on behalf of the former Nigerian President through the former Petroleum Resources Minister. Thus, about 100 INEC staff involved was allegedly suspended (The Punch, 2017).

There was a case of treasury looting involving a $2 billion arms scan. The Federal Government of Nigeria released the sum of $2 billion for the purchase of arms and ammunition for the military to fight the militants' insurgency (Gboko-Haram) in the Northern parts of Nigeria. However, this money was squandered and shared among the ministers and politicians during the former Nigerian President administration. A former Minister of State for Defence during the past administration returned to the EFCC the sum of N30 million out of his own N417 million share of the money. He later returned the balance of N167 million to the present Federal Government (The Punch, 2017). Similarly, one of the ruling party's chieftains and former Brigadier General, and who also used to be a former military governor of Kaduna State, was arrested by the EFCC for allegedly receiving a N170 million share from the former National Security Adviser out of this $2 billion. He has however refunded the loot (N170 million) to the Federal Government (The Punch, 2016)

Another case of corruption is the on-going investigation by the House of Representatives on an alleged $17 billion of stolen crude oil. The House resolution in December 2015 had ordered the probe after lawmakers established evidence of "fraudulent transactions and irregularities'' in crude and gas exports between 2011 and 2014. The investigation revealed that about 57,830,000 barrels of crude oil shortfall and 727,460 metric tonnes of LNG were undeclared. The buyers, bill of lading, arrival dates and destination ports and other documents information confirm the transactions (The Punch, 2017).

One ex-minister of Petroleum Resources in Nigeria is being investigated by the EFCC over the $1.1 billion scam. The EFCC is investigating the former minister for money laundering and it has launched a manhunt for the former minister for perpetrating fraud through his company; the ex-minster has fled and is allegedly hiding in the hills (The Punch, 2017).

Judicial corruption

There is significant and long-term corruption in the judiciary sector in Nigeria, however the anti-corruption stance by the current President Mohamodu Buhari on resuming office in May 2015 has exposed even more hitherto unknown corruption. There have been many instances of corrupt practice allegations levied against judges across the country.

The present administration demonstrated unprecedented cleansing with the arrests and prosecution of some serving and retired judges that were accused of corruption. For example, the operatives of the Department of State Services (DSS) raided the houses of several judges in different parts of the country between 7 and 8 October 2016. The operation saw four serving judges, including two Justices of the Supreme Court arrested on corruption allegations. The DSS operatives arrested the Federal High Court judge in Abuja and the Gombe State High Court judge and tried them for receiving bribes and other corruption-related offences. Others that were arrested before the raid by the DSS operatives had been sent on compulsory retirement. They include the former Chief Judge of Enugu State, the Presiding Justice of the Court of Appeal, Ilorin Division and the judge of the Kano State High Court. The judge of the Federal High Court in Ilorin and some other judges were questioned by the EFCC over corrupt allegations following the raids. On 3 November 2016 the National Judicial Council (NJC) announced its decision to bar all judges that were under investigation from sitting until the cases against them were concluded. On 8 November 2016 the Anthony General of the Federation (AGF) filed money laundering and passport fraud charges against Justice Ngwuta of the Supreme Court and arraigned him before a judge of the Federal High Court in Abuja. On 28 November 2015, the EFCC arraigned Justice Rita Ofili-Ajumogobia of the Federal High Court Ilorin for alleged bribery and conspiracy to pervert the course of justice. On 13 December 2015 Justice Adeniyi Ademola was arraigned before the Federal Capital High Court judge in Abuja for receiving gratification[8] from lawyers and the illegal

[8] The alleged gratification included N30 million transferred to Justice Ademola's wife account; a BMW Saloon 320i car valued N8.5 million etc. (The Punch, 2017).

possession of firearms (The Punch, 2017). These and many more are instances of corrupt practices that take place in the Nigerian judiciary.

Corruption in the Police Force and other sectors of the economy

The police force in Nigeria has for a very long time been involved in corrupt practices. The police extort money from commercial bus operators and motorists on the highways. They collect bribes from the criminals and set them free, and detain innocents until they bribe their way to freedom. There is corruption in the educational institutions, the customs and immigration services, in the religious places of worship and virtually in all and every sector of the whole Nigerian economy.

2.3.2. The weak Legal / Judicial System

The Nigerian legal / judicial system as at present is weak. The system is plagued with several problems and thus not functioning properly. One of the problems inhibiting the rule of law and proper administration of justice in Nigeria at present is the abuse of court process by both the bar and the unscrupulous members of the bench (Oladele, 2010). Another problem in the Nigerian legal and judicial system is the poor dispensation of justice. The quality of court decisions and thus the justice dispensed by courts have been called into question. The way justice is dispensed is a function of the quality of the bench. The Nigerian Judicial Commission once lamented the state of Nigerian judiciary with its assessment that about 80 per cent of the judges in Nigeria are either not good or below average.

Besides judicial mediocrity, the Nigerian legal and judicial also faces the problem of integrity. Some of the Judges lack credibility as members of the bench. This is so, because often the Judges' appointment is based on sentiments, political equations, ethnic considerations, and is at the whims and caprices of the appointing authorities. These invariably lead to situations where

judicial decisions in the Nigerian courts tend to be influenced by these extraneous considerations rather than the facts of the case (Oladele, 2010; Oyetibo, 2012). Another major challenge that faces the Nigerian nation is the 'corruption in judiciary'. The judiciary is commonly referred to as the last hope of the common man. This presumption is based on the expectation that the judiciary guarantees equal access to justice and equity, ensures that the rights of citizenry are adequately protected and that judgements are handed down in accordance with the dictates of the law. The judiciary however can only be the last hope of common man only where it is independent, impartial and unbiased in its dispensation of justice. Unfortunately, there is no doubt that there is corruption in the Nigerian judicial system (Abdulkarim, 2012; Salami, 2015). As discussed earlier, on one hand, as the endemic level of corruption in the Nigerian judicial system constitutes part of the causes of the weak judicial system, on the other hand a weak legal and judicial system may also encourage and pave the way for more corrupt practices in the country. The problems of a weak legal/judicial system and corruption respectively have contributed to the underdevelopment of many developing economies including Nigeria.

In the analysis below, the study attempts to show that, the institutional dimensions such as corruption and weak legal/judicial system have impacts on corporate governance and thus on firms' performance. Table 14 in the Appendix reports the Pearson Correlation Coefficients among others for the legal/judicial index and as well the anti-corruption index. The table reveals a positive and significant correlation between Tobin's Q and the legal/judicial index (i.e., significant at 0.01 level) and a positive and significant correlation between Tobin's Q and the anti-corruption index (i.e. significant at 0.05 level). This suggests that the legal/judicial system and firm market performance move in the same direction; it also suggests that both the control of corruption and firm market performance move in the same direction. The correlation between the institutional environment and firm performance is also depicted graphically in figures 2.1 and 2.2 below.

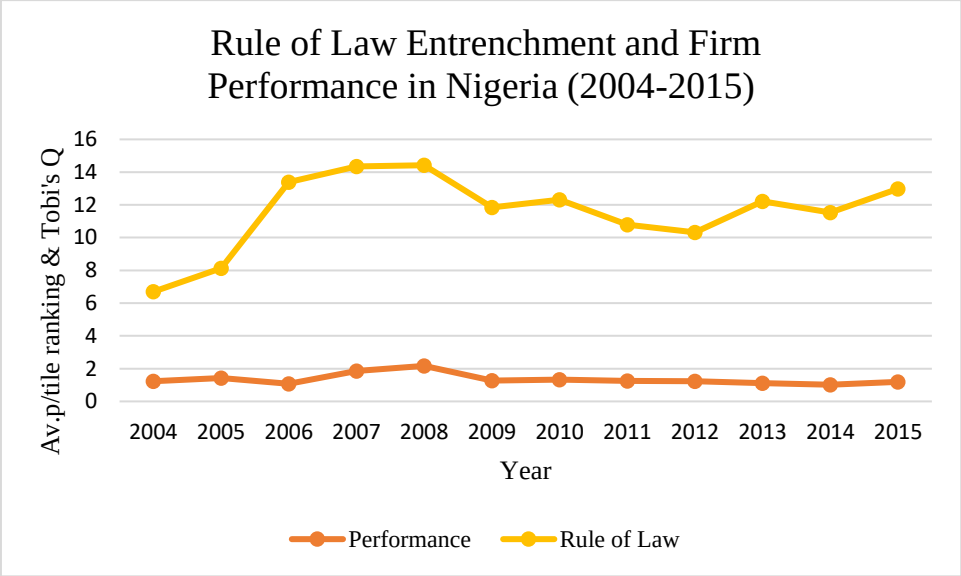


Figure 2.1: The Effect of Compliance with Rule of Law on Firm Performance

Figure 2.1 above depicts the correlation between the rule of law compliance and firm market performance. The figure reveals that as the adherence to rule of law (ROL) increases so does Tobin's Q, and vice versa when it decreases, although changes to ROL do not have a proportionate effect on performance. For example, when the rule of law ranking of 6.7 in 2004 increases to 8.13 in 2005, the Tobin's Q of 1.23 in 2004 rises to 1.43 in 2005. As the ROL ranking of 13.4 in 2006 increases to 14.35 in 2007, the Tobin's Q of 1.07 in 2006 rises to 1.86 in 2007. However, when the 14.42 ROL ranking in 2008 decreases to 11.84 ranking in 2009, the Tobin's Q of 2.17 in 2008 falls to 1.274 in 2009. However, the 12.32 ROL ranking in 2010 decreases to 10.8 ranking in 2011 which correlates with a fall in performance from Tobin's Q of 1.33 in 2010 to 1.2 in 2011. However, the ROL 2014 ranking of 11.54 increases to 12.98 ranking in 2015, which correlates with a rise in performance from 1.02 Tobin's Q in 2014 to 1.19 in 2015. As the extent of compliance with the rule of law correlates with firm performance, this suggests that the legal/judicial system has effects on governance practice and thus the firm performance.

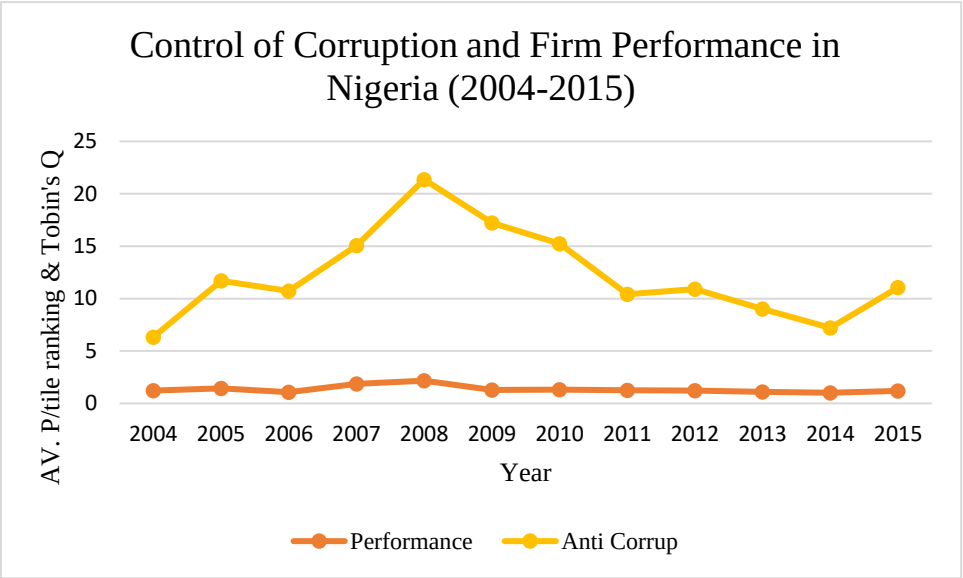


Figure 2.2: The Effect of Control of Corruption on Firm Performance

Figure 2.2. above depicts the correlation between the strength of corruption control and firm market performance. The figure reveals that as the effectiveness on corruption control increases, the Tobin's Q rises and then falls when anti-corruption activities decrease. It should be noted that changes in anti-corruption efforts do not however have a proportionate effect on firm performance. For example, as shown in Table 11 in the Appendix, when the anti-corruption ranking of 6.34 in 2004 rises to 11.71 ranking in 2005, the Tobin's Q of 1.23 in 2004 increases to 1.43 in 2005. When the anti-corruption ranking of 10.73 in 2006 rises to 15.05 in 2007, the Tobin's Q of 1.07 in 2006 rises to 1.86 in 2007. However, a decrease in control of corruption from 21.36 in 2008 to 17.22 ranking in 2009 correlates with a decrease in Tobin's Q in 2008 from 2.17 to 1.27 in 2009. A decrease in anti-corruption in 2010's ranking of 15.24 to 10.43 ranking in 2011 correlates with a fall in Tobin's Q in 2010 from 1.33 to 1.26 in 2011. Also, a decrease in the control of corruption 2012 ranking of 10.9 to 9.0 ranking in 2013 correlates with a fall in Tobin's Q from 1.23 in 2012 to 1.11 in 2013. However, an increase in anti-corruption of 7.21 ranking in 2014 to

11.06 ranking in 2015 correlates with a rise in Tobin's Q from 1.02 in 2014 to 1.19 in 2015. As the control of corruption correlates with firm performance, this suggests that corruption has significant influence on governance practices and thus firm performance.

The legal/judicial system and corruption indices are used as proxies for the institutional environment. The above analysis indicates that the institutional dimensions such as weak legal/judicial system and corruption have influence over corporate governance practice in Nigeria and in turn on firm performance. The results of the analysis suggest that there is poor adherence to rule of law in Nigeria, possibly due to the loss of confidence in the courts, judicial mediocrity and overall inefficiency in the judicial system, coupled with a lack of effective enforcement mechanisms for regulations as documented in section 2.3.2. A weak legal/judicial system in Nigeria adversely affects the country's corporate governance practices and in turn reflects adversely on firms' performances. The results emanating from the analysis are consistent with remarks and observations in prior literature (e.g. Adegbite, 2012; Okpara, 2011; Angaye and Gwilliam, 2008), which note that a lack of regulation enforcement is one of the factors constraining development of corporate governance in Nigeria.

The result is also consistent with prior studies on corporate governance in Nigeria (e.g. Price Waterhouse Cooper, 2016; Adegbite and Nakajima, 2010). For example, Claessens and Yurtoglu (2013) examine corporate governance in emerging markets using cross-country data on a sample of firms in emerging economies. They find that some salient institutional dimensions (e.g., proper functioning legal and judicial systems; the lack of corruption in general, and; overall disclosure and transparency of the regime as it relates to corporate governance) are significant for corporate governance and financial markets development in general. Furthermore, they provide evidence that better corporate governance benefits firms in terms of better performance, but that

corporate governance mechanisms may have less of an impact when the institutional environment is weak.

2.4. Summary

The firm's institutional environment influences the firm's operations and thus the corporate governance practices in the firm. The institutions such as the legal/judicial system and corruption are considered in this study as, factors external to the firm and over which the firm has little or no control. Findings from the review carried out on corporate governance practices in Nigeria reveal that, there is positive and significant correlation between the corruption control and Tobin's Q and between compliance with the ROL and Tobin's Q. Suggesting that the effects of firm-level governance mechanisms may be dependent on the strength of the prevailing institutional environment. The theoretical implication of this finding is that, the institutional environment moderates the performance impacts of corporate governance mechanisms (Filatotchchev, Jackson and Nakajima, 2013 and Zattoni et al., 2017). This is consistent with institutional theory which suggests that organizations may be influenced by normative pressure arising from their external environment (Scott, 2008). The policy implication of the finding is that, the government/policy makers will need to put in place, those measures that would ensure that corruption in the economy is effectively curbed and the legal/judicial system is strengthened and works effectively.

CHAPTER THREE: THEORETICAL LITERATURE

3.1. Introduction

This chapter offers a review of the existing theoretical literature that attempt to link corporate governance structures with firm financial performance. Corporate governance research is multi-theoretical (Chakrabarty and Bass, 2014). Corporate governance covers wide and complex aspects not only of the corporations but as well those of the nation's economic, legal, cultural and social lives. The theories underlying research in corporate governance are many. Agency theory is the main theory, other theories include: stakeholder theory, stewardship theory, the institutional theory, resource dependency theory among others. These theories are drawn from a variety of disciplines including economics, finance, accounting, law, management, sociology, organization behaviour to mention just a few (Mallin, 2010). The relevance and appropriateness use of a theory or theories is dependent on the area(s) of corporate governance that is under consideration. The theories provide varying lenses to understand the inner workings of the firm, the relationship among various stakeholders in the firm, the board's contributions to firm's overall stewardship, how the external institutional environment modifies or influences for example the ability of the board of directors to direct and control the firm, among other usefulness.

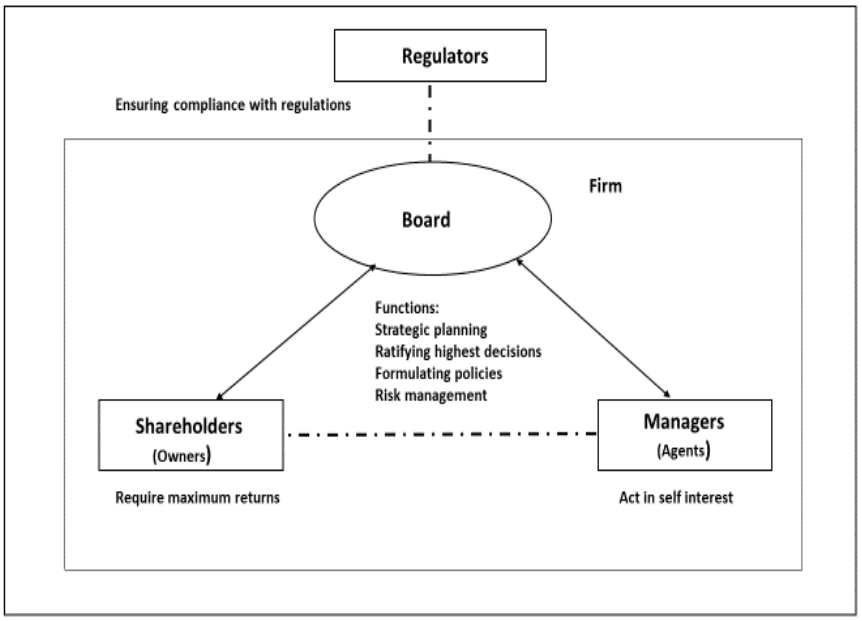
The first part of the chapter covers the agency theory perspective while the second part deals with the institutional and resource dependence theoretical perspectives used respectively in this study to complement that of the agency theory in the analysis.

3.2. Theoretical perspectives

3.2.1. Agency Theory

Agency theory as conceptualized by Jensen and Meckling (1976) is the main theoretical framework that is mostly used in corporate governance research. Agency theory is being used in many disciplines and areas of academic research such as accounting (e.g. Demski & Feltham,

1978) economics (e.g. Spence and Zeckhauser, 1971) finance (e.g. Fama, 1980) political science (e.g. Mitnick, 1975) and corporate governance (e.g. Mura, 2007; Liu, 2015) among others. In chapters 6, 7 and 8 of this study, the agency theory is used and complemented with resource dependence and institutional theories in the analysis of the board and ownership structure respectively.



(Source: Adapted from Mathew, 2013)

Figure 3.1: Model of Agency Theory

3.2.1.1. The Principal-Agent Framework

An agency relationship is defined as "a contract under which one person or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision-making authority to the agent" (Jensen and Mercling, 1976.p.308). This relationship is faced with two fundamental challenges: (a) the information

asymmetry between the principal and agent; a situation whereby the principal and the agent have access to different levels of information. In the real-life situation, the principal tends to be at disadvantage as the agent usually has more information than the principal (Mallin, 2007). and (b) the divergence of interests between the principal and agent. This challenge arises from three major assumptions: First, the assumption that the principal and agent have different attitudes towards risk-bearing (Eisenhardt, 1989). Two, it is assumed that the principal and agent naturally have different goals and interests (Eisenhardt, 1989). Third, the assumption that both the principal and agent are utility maximiser (opportunistic) and it is assumed that a rationale agent would not always act in the best interest of his principal (Jensen and Merckling, 1976)

3.2.1.2. The Separation of Ownership and Control

Agency problems arise due to separation of ownership from the control. As the business organization grows and expands operations, it may become necessary for the owner (principal) to appoint the agent (manager) to whom the decision-making powers are delegated. The agent hence runs the organization and takes decision on half of the principal. The expectation in agency theory is that the agent (manager) will act in their own self-interests, which may diverge from those of the shareholders.

The conflict of interests between the principal and agent due to separation of ownership and control had long been identified as far back as eighteenth century. For example, in his work, Smith (1776.p.700) remarks that, "*the directors of such [joint-stock] companies, however, being the managers rather of other people's money than of their own, it cannot well be expected, that they should watch over it with the same anxious vigilance with which the partners in a private copartnery frequently watch over their own. Like the stewards of a rich man, they are apt to consider attention to small matters as not for their master's honour, and very easily give themselves a dispensation from having it. Negligence and profusion, therefore, must always*

prevail, more or less, in the management of the affairs of such a company", cited in Jensen and Meckling (1976, p.305).

The work of Berle and Means (1932), almost a century later is often cited as providing one of the fundamental explanations to the potential problems arising from separation of ownership and control pointed out by Smith (1776). Berle and Means (1932) show that as countries become industrialized and their markets got developed, the ownership and control of corporations became separated. As part of attempts to align the interests of the managers of modern corporations with those of their shareholders, Jensen and Merckling (1976) develop the agency theory. In their work Jensen and Merckling (1976) note that certain costs incurred by managers and/or actions taken by them may result in lowering the firm's value. Notably, managers may award themselves overgenerous remuneration packages (i.e. pecuniary benefits) which amount to expropriating the firm's assets (Jensen and Meckling, 1976). In the process of maximising their own utility, they may expropriate corporate wealth by electing to consume perquisites (i.e. non-pecuniary benefits) more than it is necessary (Jensen and Meckling, 1976). Also, managers may choose to invest excess cash flows even in the absence of profitable investment opportunities, as against paying dividends (Jensen, 1976). Furthermore, managers may choose to devote less time, efforts, personal skills etc to value-maximising activities (Jensen and Meckling, 1976). Manager may pursue strategy to increase the size of the firm by embarking on extravagant and/or irrelevant projects and hence their prestige (Kosnik, 1987). They may engage in entrenchment strategies (e.g. engaging in activities that make them indispensable and taking hostile take-over resistance moves); managers may engage in self-dealings (Shleifer and Vishny, 1997; Tirole, 2006). The above discussion describes the moral hazard problems, as it is difficult and costly to monitor all the actions of the manager. Ordinarily, a complete contract may help resolving agent-principal problems. This specifies how manager is expected to deal in every possible situation. Because it is difficult to foresee many future contingencies, contracts always remain incomplete. Thus, the

managers end up with substantial residual control rights and may allocate investors funds as they wish.

Another problem that arises due to separation of ownership from control relates to risk sharing. The agency theory recognises that the shareholder and manager may have different attitude towards risk due to differences in their risk preference (Eisenhardt, 1989). For example, the shareholders would be interested in maximum returns on their investment, therefore they would have preference for taking high risks (Jensen and Meckling, 1976). In the contrast, the managers would prefer to engage in less risky projects, because of the fare of losing their jobs in the event such projects fail; a risk-averse manager may reject a risky but value increasing project (Amihud and Lev, 1981).

3.2.1.3. Controlling the managers' self-serving behaviours

In order to limit divergencies between the agent's and principal's interests, the principal can establish appropriate incentives for the agent and may incur monitoring costs designed to limit those non-conforming activities of the agent. In addition, in some situations, it will be beneficial as well for the agent to expend resources (bonding costs) to guarantee that he will not take certain actions which would harm the principal or to ensure that the principal will be compensated if he does take such actions (Jensen and Merckling, 1976). Given that the principal will incur monitoring cost and the agent will incur bonding cost (both pecuniary and non-pecuniary), in most agency relationships, nevertheless, in addition there will be some divergence between the agent's decisions and those which would maximise the welfare of the principal. A reduction in the principal's welfare as a result of this divergence is also a cost to of the agency relationship and is referred to as "residual loss" (Jensen and Merckling, 1976). Agency costs are thus the sum of: the monitoring expenditures by the principal; the bonding expenditures by the agent; and the residual loss.

In practice the divergence between the management and shareholders' interests is reduced by establishing both internal and external governing mechanisms through corporate governance governance (Haniffa and Hudaib, 2006; Ntim, 2009). First, measures may include putting in place the internal mechanisms which may involve establishing a functional board of directors for the firm. The board is the mechanism for aligning these divergent interests through monitoring, ratification of management decisions and by creating incentives for the managers and replacing any managers that do not create value for the shareholders (Carter, Simkins, and Simpson, 2003; Cuevas-Rodriguez, Gomez-Mejia and Wiseman, 2012). Second, shareholders may establish formal internal control systems, such as establishing the internal audit functions; putting in place the internal checks and balances; compliance with the budget restrictions to control managerial misbehaviour (Jensen and Meckling, 1976, p.308). Third, shareholders may also design incentive remuneration systems (e.g. competitive salaries, stock options, and shareholding (Eisenhardt, 1989, p.58) which serve to more closely align the managers' interests with those of shareholders. The managers may also be rewarded on the basis of their performance (Jensen and Meckling, 1976, p.308). Fourth, by imposing minimum managerial shareholding to align interests with shareholders (Jensen and Meckling, 1976, pp.323, 325). Fifth, managers may be made to incur some bonding costs. Managers can be urged to sign contractual guarantees that safeguard shareholders against malfeasance (Jensen and Meckling, 1976, p.308). These may include: (1) ensuring that the financial statements are audited by independent statutory auditors and that managers take responsibility for their correctness of the information provided therein (2) written commitment to comply with contractual agreements regarding budget restrictions, compensation policies, operating rules, policies and procedures (Itim, 2009). Shareholders should ensure an optimal balance between instituting behaviour-oriented internal structures (e.g. board and auditing structures) and outcome-oriented contracts (e.g. salaries, stock options, and shareholding) (Eisenhardt, 1989, p.58).

3.2.1.4. Limitations of Agency Theory

The two last decades have witnessed a huge surge in the study of corporate governance around the world. The basic premise of agency theory is that the agents (managers) may engage in self-serving behaviour that may be incongruence with the shareholders' wealth maximization objectives (Shleifer & Vishny, 1997). Much of the research in this area of study is mainly analysed using the agency theory lenses. Using the agency theory principle, shareholders may use a diverse range of corporate governance mechanisms such as monitoring by boards of directors (Fama and Jensen, 1983) or large outside shareholders (Demsetz and Lehn, 1985); using the equity-based managerial incentives to align the interests of agents and principals (Jensen and Murphy, 1990; Murphy, 1985); constraining the managerial opportunism by external markets such as the threat of take-over (Grossman & Hart, 1998), product competition (Hart, 1983; Jensen, 1993) and managerial labour markets (Fama, 1980).

However, there is increasing critiquing recently by researchers, that the corporate governance research is solely grounded in and over-relies on agency theory (e.g. Zattoni et al., 2017; Filatotchchev, Jackson and Nakajima, 2013; Nicholson and Kiel, 2004). They critic that the principal-agency framework largely dominates research on corporate governance and that agency theory restricts its attention mostly to two actors (i.e. shareholders and managers) while the institutions play a relatively limited role. Another criticism, is that agency theory approach is insensitive to how the institutions shape the identities, interests and interactions among actors in corporate governance (Aguilera and Jackson, 2003).

Nevertheless, the sociological strands of institutional theorists provide an alternative explanation for firm behaviour. They argue that rather than making predictions based on self-interested actors with bounded rationality, the institutional theory identifies the regulative, normative and cognitive mechanisms that shape the identities and interests of a wider set of

stakeholders (DiMaggio & Powell, 1983). The institutional theory, unlike agency theory goes beyond the focus on how the laws shape agency conflicts, and now looks at how the wider cultural, social and political factors shape the cross-national diversity of actors and settings in corporate governance (Aguilera & Jackson, 2010).

Although the legal-economic view remains the dominant paradigm since the 1980s however, more of the research in later years has begun to move away from focusing on the effectiveness of individual mechanisms and has started to take a more holistic view of corporate governance system as an embodiment of interdependent elements (e.g. Beatty and Zajac, 1994). With this alternative paradigm, corporate governance systems themselves as argued by Fiss (2008) are viewed as being embedded in larger institutional and legal frameworks, and that, the effectiveness of corporate governance practices is contingent upon the institutional environment in which corporations and their stakeholders are embedded. In their view, North (1990) and Williamson (2000) similarly acknowledge the embeddedness of corporate governance systems in larger society-wide systems of institutions.

3.3. Institutional Theory

The works of early institutional theorists in sociological research provide significant insights which has assisted in the development of institutional theory. For example, Selznick (1957, p.16) views "institutionalization as a process, which reflects an organization's own value, the people that shapes its activities and how such organization responds to the society". This view is supported by that of Sumner (1906), which considers institution as consisting of both the concept and structure. Sumner contends, that the concept explains institutions in terms of its purpose or functions, while the structure embodies the idea of the institution itself. Sumner (1906) contends that the structure provides the instrumentalities through which the idea is put into action. Dillard *et al.,* (2004) argue that an institution is an established order comprising rule-bounded and standardised

social practices. Like other theorists contend, the institutions external to organizations usually exert certain influences on them with respect to their corporate practices. Meyer and Rowan (1977, p. 341) for instance argue that, institutions inevitably "involve normative obligations but often enter into social life primarily as facts that must be taken into account by actors; a no smoking symbol, for instance, is an institution with legal status as well as an attempt to regulate smoking behaviour". Similarly, Zucker (1983, p.4) believes that the "external institutional environments could constrain an organization, determine its internal structure, growth and/or decline its survival". These views in all, point to the fact that, the firm's institutional environment has influence on organization's behaviour and practices.

Scott (2014) views institution from a broader perspective. According to him, 'institutions comprise the regulative, normative and cultural-cognitive elements that, together with associated activities and resources, provide stability and meaning to social life' (Scott, 2014.p.56). They are multifaceted, durable social structures made up of symbolic elements, social activities and material resources. In his theoretical framework, Scott (2008) asserts that, institutions rest on three main pillars: the regulative, normative and cultural-cognitive systems. The regulatory processes involve the rules setting, monitoring and sanctioning in attempt to influence future behaviour. He remarks, that institutions control and constrain behaviour; institutions impose restrictions by defining legal, moral and cultural boundaries, distinguishing between acceptable and unacceptable behaviour. The normative system rests heavily on both the values (preferred or desirable behaviour) and norms (the specification of how things should be done). The organizations are influenced among other things by normative pressure, which arises sometimes from external sources such as the state or from within the organization itself. The organization may be guided by legitimated elements such as the standard operating procedures or professional certification and/or some governmental requirements (Zucker, 1987). Regarding the cultural-cognitive system, the symbols (e.g. words, signs and gestures) may shape the meanings that are attributable to objects and activities. Meanings arise in interaction and are maintained and transformed as they are employed to make sense of the

on-going events. Therefore, to understand or explain any action the analyst must take into consideration not only the objective conditions but as well the actor's subjective interpretation of such action. The cultural-cognitive system, as Scott (2008) argues, recognises that 'internal' interpretive processes are shaped by 'external' cultural framework. In practice, a combination of these elements can be found at work. However, just one pillar may be in operation and may assume primacy (Scott, 2008). It is desirable to have these pillars aligned, as their misalignment may create resources that different actors may employ for different purposes, in which case may result in confusion and conflicts (Scott, 2008).

The institutional theory literature also addresses issue concerning the legitimacy of the organization. When effective institutions are present, a major concern for organisations is to gain legitimacy (Selznick, 1957; Scott & Mayer, 1994; Hall & Taylor, 1996). The significance of legitimacy to organisations is stressed by Scott et al., 2000 who argue that if organizations are to survive and thrive in their social environments, they will require more than the material resources and technical knowhow. In other words, for organizations to gain legitimacy they will need to gain social acceptability and credibility (Scott et al., 2000). The legitimacy of an organization, is also defined by Suchman (1995, P. 574) as 'a generalized perception or assumption that the actions of an entity are desirable, proper or appropriate within some socially constructed system of norms, values, beliefs and definitions'. Legitimacy unlike the input material meant to further the production of any form of output, is a symbolic value to be displayed in a manner that is visible to outsiders (Scott, 2003). Berger and Luckman (1967) describe legitimacy as invoking a shared meaning among the participant actors. They argue that 'legitimation explains the institutional order by ascribing cognitive validity to its objectified meanings' (Berger and Luckman, 1967 P.92-93).

From the cultural cognitive dimension, Mayer and Scott, (1983) ague that organization legitimacy refers to the degree of cultural and political support for an organization. The authorities,

which may vary from place to place and time to time, may be empowered to confer legitimacy. The agents of the state, the professional bodies and trade associations are typical examples of such authorities and whose certification or accreditation is often used as a primary indicator of legitimacy (Dowling and Pfeiffer, 1975; Ruef and Scott, 1998). The implementation of reforms can be conceived as processes of legitimization and apparent conformity (Meyer and Rowan, 1977). It has been argued that organizations not only compete for customers and resources, but also for political power and institutional legitimacy (DiMaggio and Powen, 1983). For instance, the adoption of corporate governance codes may be driven by external pressure (Aguilera and Cuervo-Cazurra, 2004; Zattoni and Cuomo, 2008). The search for legitimacy may push companies to adopt practices, even for a ceremonial purpose, rather than for improving technical efficiency (Mayer and Rowan, 1977; Meyer and Scott, 1992)

As discussed above, earlier institutional theorists with their work in sociological research have contributed significantly to the development of institutional theory. The use of institutional theory is a contemporary phenomenon that is gaining grounds in corporate governance research. Some researchers use institutional theory and or in combination with other theories to investigate a variety of corporate governance issues such as those relating corporate governance practices in the developing economies (e.g. Adegbite, Kenneth Amaeshi and Nakajima, 2013); gender and ethnic minority diversity and firm performance (Carter, 2010; Erhardt et al., 2008); board composition and institutional voids (Chakrabarty and Bass, 2014) to mention just a few.

3.3.1. Limitations of Institutional Theory

A few limitations inherent in institutional theory have been identified in the literature. Donaldson (1995) for instance contends that institutional theory does not provide sufficient consideration to the managerial/agency role and strategic choices being adopted in confronting external environmental pressures. This means that it does not directly address the managerial discretion

which may be assumed to be important, and it does not show how companies cope with the external institutional challenges. Similarly, Oliver (1991) contends that institutional theory tends to de-emphasise both the ability of organisations to dominate or defy external demands, and the usefulness in pursuing particular strategies.

To overcome some of the inherent limitations attributable to institutional theory, some scholars do combine it with other theories to provide a better understanding of the issues being investigated. A few examples of studies that combine institutional theory with other theories are cited in Table 3.1.

Theory	**Aim**	**Assumptions**	**Issues Analysed**	**Conceptual Studies that combine agency theory with institutional theoretical framework**	**Empirical Studies that combine agency theory with institutional theoretical framework**
Agency	Maximization of shareholders' wealth	Individuals are rational beings. Individuals possess selfish/opportunistic behaviour. The principal is risk-neutral while the agent is risk averse.	The relationship between principal & agent. Insider/outsider mechanisms for controlling agents' behaviour and performance		
Institutional	Legitimation of the organization in social context	Individual adapts to the system of norms, values and beliefs within institutional environment.	Organizational Practices	Filatotchev and Boyd (2009); Strange, Filatotchev, Buck, and Wright (2009); Eisenhardt (1988); Wiseman et al., (2012).	Young, Stedham and Beekun (2000); Singh and Gaur (2009); Bruton, Filatotchev, Chahine and Wright (2010); Filatotchev

					and Wright (2011); Johanson and Østergren (2011); Renders and Gaeremynck (2012); Bonini, Alkan and Salvi (2012).

Source: (Adapted from: Cuevas-Rodriguez, Gomez-Mejia and Wiseman, 2012)

Table 3.1. Summary of the Major Characteristics of Agency and Institutional Theory Frameworks

3.4. Resource dependency Theory

The final supporting theory of corporate governance in this study is the resource dependence theory. Resource dependence theory provides insight into how the boards function to create or maintain a network for firms and connect firms to external resources (Charkrabartty and Bass, 2014). Resource dependence theory suggests that firms operating in the same external environment vie for resources from a finite resource pool (Pfeffer and Salancik, 1978; Bass and Chakrabarty, 2014). The resource dependence perspective as applied to corporate governance is that, the board is a mechanism for firm to gain access to resources in the external environment (Hendry and Kiel, 2004). According to resource dependence theory, the directors on the board provide essential resources to the firm or secure resources it through linkages to the external environment (Pfeffer and Salancik, 1978; Pearce and Zahra, 1992; Hillman, Cannella, and Paetzold, 2000). The directors bring to the board for example the expertise, different perspectives, ties to other firms and legitimacy (Hillman, Cannella and Harris, 2002).

Pfeffer and Salancik (1978) argue that there are four major benefits derivable from environmental linkages that the directors on the board may provide the firm: (a) provision of specific resources such as expertise and advice from the individuals with experience in various fields (b) creation of channels for information flow between external organizations and the firm (c) obtaining commitments or support from important organizations outside the firm and (d) creating legitimacy for the firm. Hillman, Cannella, and Paetzold (2000) extend the work of Pfeffer and Salancik (1978) by developing taxonomy of director types that provide various resources to the firm. In their study, Hillman, Cannella, and Paetzold (2000) link the Pfeffer and Salancik's benefits list with some commonly observed characteristics of directors in large public corporations. They classify directors into: insiders, business experts, support specialists and community influential and specify the kinds of resource needs and linkages which each of these director categories is expected to bring to the firm.

In the earlier discussion on agency theory, it was mentioned that agency problems in the firm arise due to a separation of ownership and control. Because of this phenomenon, the interests of both the managers and owners may diverge and the board of directors is the mechanism for aligning the interests through monitoring and ratifying of management decisions. The agency role of the directors basically is monitoring. On the other hand, in their resource dependence roles, the directors serve to connect the firm with external factors and by so doing reduce uncertainties and transaction costs. The resource dependence role of directors is theoretically different from their agency roles, although directors may perform both roles simultaneously (Johnson et al., 1996)

The board's function of monitoring and control is fundamental from the agency theory perspective (Jensen and Meckling, 1976). It has been argued that a more diverse board may be a better monitor of managers because diversity increases board independence (Carter, Simkins and Simpson, 2003). The general view in the corporate literature is that agency theory does not provide

a clear prediction of the link between board diversity and firm financial performance as much as the resource dependence theory does (Cater et al., 2010)

Theory	Agency Theory (Jensen & Meckling, 1976)	Resource Dependence Theory (Pfeffer & Salancik, 1978)	Institutional Theory (Selznick, 1957)
Overall perspective	Boards reduce the conflict of interest between principals and agents to minimize agency costs and protect shareholders' investments (Fama & Jensen, 1983)	Boards link firms with their external environment and provide the firms access to external resources (Zahra & Pearce, 1989; Henddry & Kiel, 2004)	The presence or absence and the efficacy or inefficacy of institutional influences, on the choices and actions of the boards (Hung, 1998; Scott & Meyer,1994)
Normative elements of the corporate governance theory	Boards should monitor and control the management in the firm **(**Henddry & Kiel, 2004)	The boards should help firm to attain, rather than use external resources **(**Henddry & Kiel, 2004; Hung, 1998).	For the board to effectively direct and control the firm, it , should take into account the institutional deficiencies, rules and taken-for-

			granted conventions (Hung, 1998)
Influential factors	Contingencies that arise from internal environment (Hung, 1998)	Contingencies that arise from the external environment (Hung, 1998; Zahra & Pearce, 1989)	Institutionalized external pressures and institutional deficiencies (Hung, 1998; Scott and Mayer 1994)
Boards' functions	Direct and control the firm (Fama and Jensen, 1983)	To network (Hung, 1998; Zahra & Pearce, 1989)	To help the firm navigate the institutional the institutional context (Hung, 1998; Selznick, 1957)

Source: (Adapted from Chakrabarty & Bass, 2014).

Table 3.2. Summary of Theoretical Perspectives on Corporate Governance

3.4.1. The Agency and Resource Dependence roles of Directors

The directors on the corporate boards perform two main functions. The monitoring and resource provision functions. The monitoring function of the board refers to the responsibility of directors to monitor managers on behalf of shareholders. The underlying theoretical basis for the board's monitoring role is derived from the agency theory, which predicts the potential for conflict of interests due to the separation of ownership and control in organization (Berle and Means, 1932; Fama and Jensen 1983). In line with agency theory, it is the primary responsibility of the board to

monitor the actions of the managers and to protect the interests of the owners (Jensen and Meckling, 1976; Eisenhardt, 1989). Similarly, from the legal and finance perspective, it is the fiduciary responsibility of the directors to ensure the agents act in the best interest of the principal (Miller, 1993; Bainbridge, 1993). The board's monitoring is important, because when ownership and control are separated, the agent may pursue its own interest at the expense of the principal (Berle and Means, 1932), thereby resulting to agency costs. Monitoring by the board of directors may help reduce this agency costs, and invariably enhance firm performance (Fama, 1980; Zahra and Pearce, 1989).

The agency theory stresses the importance of incentives for effective monitoring by the board It suggests that when incentives are aligned with shareholders' interests, the boards will be more effective monitors of the management (Jensen and Meckling,1976; Fama, 1980). Two main proxies that receive prominence in agency theory research are the board dependence and equity compensation. The agency theorists argue that boards constituted basically by the insiders (current or former managers/employees) or those outsiders who are not independent of the management or the firm tend to have less incentive to monitor management, as they owe their dependence on the CEO or the firm. They contend further that the insider directors' dependence on the current CEO or firm brings about a disincentive for insiders (and non-independent outsiders) to take side with shareholders when their interests conflict with those of the management. However, boards dominated by non-affiliated outsider directors are viewed to be better monitors as they lack such disincentive to monitor (Hillman and Dalziel, 2003). The employment of equity compensation as an incentive to monitor by directors has attracted significant attention (Jensen, 1983). The equity compensation aligns the interests of the directors with those of the shareholders; it thereby serves as a source of motivation for the directors to be better monitors (Elson, 1995; Dalton et al., 2003).

Another important function of the board is the provision of resources. This function refers to the ability of the board to bring resources[9] to the firm. The theoretical underpinning of this function is based on Pfeffer and Salancik's (1978) work on resource dependency. They argue that "when an organization appoints an individual to a board, it expects the individual will come to support the organization, will concern himself with its problems, will variably present it to others, and will try to aid it" (Pfeffer and Salancik's, 1978.p.163). Resource dependence theory suggests, there is a direct relationship between the board's provision of resources and firm performance. Pfeffer and Salancik (1978) remark that resources help reduce dependency between the firm and external contingencies. Resources provision reduces uncertainty (Pfeffer, 1912), lowers transaction costs (Williamson, 1984) and supports the survival of the firm (Singh, House and Tucker, 1986).

The resource provision function of the board includes but not limited to providing of expertise (Baysinger and Hoskisson, 1990); providing legitimacy or bolstering the public image of the firm (Selznick, 1949); administering advice and counsel (Mintzberg, 1983); providing the firm with linkages to external environment (Hillman et al., 2001); facilitating access to resources such as capital (Mizruchi and Stearns, 1988) etc. Furthermore, Zahra and Pearce (1989) propose two roles (i.e. the strategy and service roles) for directors beyond their monitoring roles while Johnson et al. (1996) propose roles with a slightly different terminology (i.e. control, service and resource dependence roles) for the directors. In conclusion, there is need for integration of the two perspectives for investigating these functions.

Most of the investigations seeking evidence of relationship between board of directors and performance usually follow either the agency or resource dependence path. The use of agency perspective for board-performance investigation is more predominant, relative to the resource

[9] Resource refers to ''anything that could be thought of as a strength or weakness of a given firm'' (Wernerfelt, 1984.p.172).

dependence path that is less explored. While the agency theorists contend that the key activity to the board is the monitoring of the management on behalf of the shareholders and that effective monitoring will reduce agency costs and improve firm performance. The resource dependence theorists however, seek to examine the relationship between the board as a provider of resources (e.g. advice and counsel, legitimacy, linkages to other organizations etc.). The two perspectives basically differ from each other. Since in practice, the boards both monitor and provide resources; and theoretically, both the monitoring and resource provision relate to firm performance, it is important therefore, that both the agency and resource dependence perspectives are integrated. If the two perspectives however, are not integrated, it may mean that the agency theorists and resource dependence theorists each have examined one board function (the monitoring or provision of resources) at the expense of the other, thus contributing to an incomplete understanding of what board does and their impact on firm performance. Using these separate approaches provides a relatively incomplete understanding of what contributes to the provision of resources and effective monitoring (Hillman and Dalziel (2003).

3.5. Summary

The role of the board in an agency framework is to address and resolve the agency problems between the managers and shareholders. The board is the mechanism for aligning these divergent interests through monitoring and ratification of management decisions and by creating incentives for the managers and replacing any managers that do not create value for the shareholders (Carter, Simkins, and Simpson, 2003; Cuevas-Rodriguez, Gomez-Mejia and Wiseman, 2012). The agency problems between the manager and owner relate to issues such as misallocation of company funds, excessive managerial consumption of perquisites, shirking, empire building, and entrenchment. The theory suggests that agency problems between the managers and owners will be lower when the interests of managers and owners are aligned through higher managerial share ownership (Jensen and Meckling, 1976). The agency theory lenses are

also employed in investigating the relationship between corporate ownership structure and performance. The resourcefulness of the theory lies in its capability to make predictions as to how the rational individuals would behave in a bilateral relationship between self-interested individuals that are faced with information asymmetry about each other's efforts and interests (Cuevas-Rodriguez, Gomez-Mejia and Wiseman, 2012). The blockholders may assist in resolving the issues. As they hold a significant proportion of the firm's equity, they have the incentive to collect information and monitor the managers (Shleifer & Vishny, 1997). Given the fact that, they possess enough voting power, they could force management to act in the best interests of shareholders (La Porta et al., 1999). However, as the ownership increases further, at some point, a concentrated a shareholder may exchange profits for private rents (Faccio, Lang & Young, 2002; Shleifer and Vishny, 1997). Consequently, this may result in minority shareholders' expropriation by large owners, especially the ultimate shareholder.

However, agency theory has been criticised for being too narrow because it emphasises the contract solely between a principal and an agent and exclusively the ways in which the contract can be made more efficient from the perspective of the principal (Eisenhardt, 1989; Wright et al., 2001).

Our earlier discussion on institutional theory suggests that institutional forces affect organisations' processes and decision making. The institutions provide the rules of the game that structure human interactions in the societies and organizations are the players bounded by those formal and informal rules (North, 1990). Institutional theory emphasises the influences of the systems surrounding organizations that shape social and organisational behaviour (Scott, 1995). It focuses on external norms, regulations and the social pressures outside a firm's immediate control that affect the firm's behaviours and outcomes (Selznick, 1957). With the institutional approach to corporate governance, emphasis is placed on the symbolic nature and cultural embeddedness of

corporate governance models in a larger institutional framework. Thus, the view of corporate governance model using this approach is much more dynamic and culturally constructed than that employed in the traditional contractual (agency) approach. The study thus goes beyond the use of agency theory as a single lens but as well examines corporate governance from the institutional theory perspective.

Regarding the resource dependence theory, the emphasises is that, the board and more importantly the non-executive directors can provide the firm with the needed critical resources including the expertise, experience on other boards, independence, and occupational skills (Haniffa and Cooke, 2002). The outsider directors can bring to the firm the reputation and critical business contacts (Haniffa and Hudaib, 2006). The board can connect the firm and facilitate its access to the "power that be" in government for information and capital (Nicholson and Kiel, 2003). The board provides the firm with critical link to a firm's external environment and significant stakeholders, such as suppliers, customers, and competitors. As a result, it has been argued that greater level of links to the external environment is associated with better access to resources (Nicholson and Kiel, 2003), all which may impact positively on firm financial performance.

CHAPTER FOUR: LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

4.1. Introduction

This chapter presents the rationale for carrying out a study on corporate governance and firm performance. The study examines several governance mechanisms along two major dimensions in terms of the board and ownership structure. Thus, the study investigates the role of outside directors, specifically whether their presence on the board has an impact on corporation performance. It investigates the diversity of corporate boards, especially whether the resource dependence, human capital and agency roles of the diverse directors on the board have an impact on corporate value. The study examines several ownership-related governance mechanisms and their impact on corporation performance. It investigates various forms of ownership and establishes the identity of the major investors that drive the business. It goes on to review the conflict of interests between the minority and large shareholders, and also examines the impact of a firm's institutional environment on corporate governance.

The review of literature is organised into two major sections, namely: (a) the structure of the board of directors, and (b) firm ownership structures. It is hoped that the study will build on the body of prior research to contribute to the wider literature in these aspects of corporate governance.

4.2. The Board of Directors' Structure

The board of directors is an important governance mechanism in a firm. It is elected by the shareholders to govern the affairs of the firm, principally to protect and promote the interests of shareholders whilst meeting the firm's obligations to other stakeholders. The board is responsible for the selection of the firm's leadership, defining the corporate mission, and setting

the firm's strategic goals. The board has the power to hire and fire and compensate the firm's top executive management well; it has the power to ratify important decisions and monitor executive management activities (Fama and Jensen, 1983). The board and its various committees are considered the most important governance mechanism for monitoring top management. It has the primary responsibility for ensuring good corporate governance in the firm (SEC code, 2011), and is required to ensure that the firm operates within the law and adheres to governance codes while observing the highest ethical standards. Given its enormous responsibilities and position at the fulcrum of corporate governance, the board of directors is considered an important governance mechanism in controlling agency conflicts in the firm (Carcello, 2009).

4.2.1. Board Composition and Firm Performance

Monitoring of the firm's management by the board of directors has long been adopted as a mechanism for resolving the agency problems between top management and shareholders. The board oversees the managers and motivates them towards enhancing the firm's value. It does this by providing managers with pecuniary incentives such as stock ownership, stock option plans, and performance-based salaries (Hermalin and Weisbach, 1991). The spate of firms failure in the recent past has, however, called into question the extent of the effectiveness of boards in their monitoring roles[10]. Notwithstanding this, some researchers (e.g. Fama and Jensen, 1983) are in favour of the board's monitoring role and yet argue that because of the concern for reputation and pressure from the market, the directors will be compelled to fulfil their primary obligations. Hermalin and Weisbach (1991) note that the extent and effectiveness of the board's monitoring function depends on its composition; but whether the boards' effectiveness could really be improved by changing its composition is a question that will have to be answered empirically.

[10] The boards are generally believed to have failed in their responsibility to monitor the management and directing of the firms (American Law Institute, 1982; Dunn, 1987).

4.2.2. The Endogeneity of Board Structure

The general view in corporate governance literature (Hermalin and Weisbach, 1999; Hermalin and Weisbach, 2003; Adams *et al.*, 2010) is that the board of directors is an endogenously determined institution. As argued in Hermalin and Weibach (2003), it is an economic institution that helps in solving agency problems between managers and owners. However, the board's economic function may also be determined by the organisational problems that they help to address and solve. Given this line of reasoning, it could be argued that the board of directors' structure is an endogenous variable (Hermalin and Weibach, 2003).

Several prior studies (e.g. Hermalin and Weisbach, 1991; Hermalin and Weisbach 1988; Satia-Atmaja, 2009) argue that as board composition could affect firm performance and the firm performance could also affect the firm's future board composition. For example, Hermalin and Weisbach (1988) argue that poor performance of a firm could cause its insider directors to be replaced by outside directors. The board composition therefore is said to be endogenously determined (Hermalin and Weisbach, 2003). This raises two main questions, as discussed below:

Does board composition affect firm performance?

The literature on the importance of board composition in relation to board oversight responsibility and thus firm performance dates back three or four decades (Carcello, 2009). The idea of independent directors has attracted more attention and currency amongst stock market regulators and corporate governance researchers over the last few decades (Farrar, 2001). Corporate governance reforms are also increasingly focusing on independent directors (sometimes called non-executive directors) with the hope that their presence on boards will bring about greater transparency, accountability and corporate governance efficiency (Aguilera, 2005). The literature generally suggests that the representation of independent directors on boards enhances the

effectiveness of the boards in monitoring executive management and exercising control on the behalf of shareholders (e.g., Fama & Jensen, 1983; Weisbach, 1988). Conversely, firms that are dominated by executive management may suffer problems associated with collusion and transfer of the firm's wealth (Cotter and Silvester, 2003).

Does firm performance affect board composition?

Conversely, a number of researchers have also examined whether board composition is endogenously determined by firm performance; these studies have similarly produced mixed results. For example, Hermalin and Weisbach (1988) provide evidence that the proportion of outside directors tends to increase while that of insiders reduces when a firm has performed poorly. Hermalin and Weisbach (1991) also find that poor performance leads to changes in board composition but argue that any cross-sectional regression of performance on board composition will result in biased estimation, as changes in board composition results from prior performance. Also, Klein (1998) examined whether past performance leads to changes in board composition between 1992 and 1993 for the lowest and highest quintile of firms. In contrast to Hermalin and Weisbach's (1988) evidence, Klein (1998) finds no evidence that firms change their overall board composition in response to prior poor (or good) performance. Denis and Sarin (1999) who examine the ownership and board composition on a sample of 583 firms over a 10-year period (1983-1992) provide evidence that changes in the board composition is strongly related to prior stock price performance, among others.

4.3. The Board of Directors' Independence

The independence of the board is key to effective firm level corporate governance. In recent years, the performance of the corporate board has been under scrutiny, a consequence of a

series of corporate financial failures around the world.[11] The main concern is that of an over-dependence of the directors on the management and consequently the influence of the CEOs on the boards, especially with respect to composition and processes (Bebchuk and Fried, 2004; Morgensen, 2005 and Kumar and Sivaramakrishnan, 2008). With the Anglo-US unitary board model, the influence of the executive directors over the board is still an issue (Johanson and Ostergren, 2010). The presence of more NEDs on the board helps in balancing the influence of executive directors. One solution therefore may be to increase the number of NEDs as was the case in the UK after the 1992 Cadbury Report (Johanson and Ostergren, 2010). The Nigerian model of corporate governance is tailored to that of the UK, therefore balancing the influence of executives with that of the non-executive directors sitting on the board would also be a relevant factor in the composition of the boards of Nigerian listed firms.

Empirical studies that provide evidence for positive relationship

Author (Year)	**Study period**	**Sample size**	**Performance variable**	**Summary of result**
Pearce & Zahra (1992)	1983-1989	450 Fortune 500 firms	ROA, ROE, EPS, Net Profit Margin (NPM)	Proportion of outside directors on board is positively and significantly associated with performance (i.e. ROA, ROE, and EPS) but has no impact on NPM.
Daily & Dalton (1993)	Not provided in the study	186 small listed firms	ROA, REA, PER	Proportion of outside directors on board is positively and significantly associated with performance
Coles et al., (2008)	1992-2001	8165 firm years' observation from IRRC	Tobin's Q, ROA	Greater proportion of NEDs on the board is positively (negatively) associated with firm performance (Tobin's Q) in complex (single) firms
Gupta &	1990-2003	744 listed firms	Market value, Market Value	The announcement of resignation of the Independent Non-Executive Directors results in 1.22% loss in

[11] E.g. Enron financial debacle in 2001

Fields (2009)			to Equity, ROA, ROE	firms' market value. Implying that the investors value board independent, as the presence of independent boards is positively associated with greater monitoring of management.

Empirical Studies that provide evidence for negative relationship

Agrawal & Knoeber (1996)	1987	400 listed firms	Tobin's Q	More outside directors on the board leads to poorer firm performance.
Yermack (1996)	1984-1991	452 large industrial corporations	Tobin's Q	The proportion of outside directors on the board is positive and significantly associated with firm performance

Empirical Studies that provide evidence of insignificant relationship

Daily & Dalton (1992)	1989	100 listed firms	ROA	The proportion of outside directors on the board has no impact on firm performance
Klein (1998)	1991-1993	486 firms listed on S&P 500	ROA, Market Returns (MR), Productivity	There is an insignificant relationship between the proportion of NEDs and firm performance (ROA, MR) but the proportion of NEDs is negative and significantly associated with firm performance (Productivity)
Wintoki et al., (2012)	1991-2003	6000 listed firms	ROA	The study finds no causal relationship between board independence and firm performance

(Source: Adapted from Owusu, 2012)

Table 4.1: Empirical Studies on the Relationship between Outside Directors and Firm Performance in the US

In the UK, following several corporate scandals and a perceived lack of confidence in the financial reporting system, the Cadbury committee was set up. The Cadbury report (1992) is recognised globally as a landmark in corporate governance regulation (Johanson and Ostergren, 2010). The report assumes that board independence would have a positive influence on the quality of financial reporting (Johanson and Ostergren, 2010). The Cadbury report and other subsequent reports[12] in the UK advocate for a more independent director on the board. In the US, regulatory bodies such as the SEC, along with the NYSE and NASDAQ have instituted several reforms to promote the board's independence (Kumar and Sivaramakrishnan, 2008). Most corporate boards are dominated by outside directors (Liu *et al*., 2015). In the Nigeria context, board independence has just begun to gain ground in the last few years after the issue of the 2003 corporate governance code. The Nigerian code of corporate governance code requires every publicly-listed company to have at least one independent director on board. It requires that an independent director be free of any relationship with the company or its management that may impair or appear to impair the director's ability to exercise independent judgement (SEC code, 2011). The code specifies several criteria for a director to qualify as an independent director. These requirements are enumerated and discussed in section 5.5.1. of the study.

Empirical Studies that provide evidence for positive relationships

Author (Year)	**Study period**	**Sample size**	**Performance variable**	**Summary of result**
Faccio & Lasfer (1999)	1996-1997	1650 listed firms	Q-ratio, ROE, ROA, P/E ratio	Companies with proportion of outside directors on the board perform better than other companies without independent boards
Weir et al., (2002)	1994-1996	311 listed firms	Q-ratio	The presence of independent non-executive directors on the board is positively and significantly associated with firm performance

[12]E.g. Higgs report (2003)

Empirical Studies that provide evidence for negative relationship

Guest (2009)	1981-2002	2746 large sample size	Tobin's Q, ROA, Shares returns	Proportion of outside directors on the board has negative and significant relationship with firm performance variables

Empirical Studies that provide evidence of insignificant relationship

Vafeas & Theodorou (1998)	1994	250 Public traded firms	Market-to-book ratio, Operating Performance /Total Assets	Find insignificant relationship between proportion non-executive directors and firm performance
Laing & Weir (1999)	1992 & 1995	115 listed firms	ROA	Find insignificant relationship between the proportion of non-executive directors on the board and firm performance.

(Source: Adapted from Owusu, 2012)

Table 4.2: Empirical Studies on Relationship between Outside Directors and Firm Performance in the UK

It is apparent the opinion in the literature is that, the extent to which the board is independent of the executives, specifically the CEO, depends on the degree of the CEO's bargaining power (Adams, Hermalin and Weisbach, 2010). Where the CEO has bargaining power, for instance when he has demonstrated that he is a 'rare commodity' by performing well, the board independence declines. In other words, a CEO who performs well ends up facing a less independent board. Some studies (e.g. Baker and Gompers, 2003; Ryan and Wiggins, 2004; Boone *et al*., 2007) provide evidence consistent with the view that successful CEOs are able to bargain for less independent boards. Boone *et al.* (2007) find that measures of the CEO's bargaining power, tenure and the CEO's equity stake are negatively correlated with board independence; this finding is consistent with Hermalin and Weisbach (1998)'s model prediction.

In recognition of its importance, board independence has now been embraced around the world as an essential element of good corporate governance. The incidents of Enron in the US in 2001 and other corporate scandals around the globe further increase the focus on independence, not only in relation to statutory auditors but also to the board of directors (Higgs Review, 2003). Law makers and stock exchanges in many countries[13] are now prescribing higher representation of outside directors on the boards of publicly listed companies (Liu *et al*., 2015). The requirement for more independent boards coincides with empirical evidence from several studies that board independence impacts positively on firm performance.

Mura (2007) examines the relationship between firm performance and both board composition and ownership of the UK firms for the period 1991-2001, using a technique that controls simultaneously for endogeneity of the independent variables and for fixed effects (i.e. GMM methodology). The study provides evidence of a significant and positive relation between the proportion of non-executive directors on board and firm performance.

Satia-Atmaja (2009) uses panel data on a sample of Australian publicly listed firms over a period of six years (2000-2005) to examine governance mechanisms and firm value. The findings of the study suggest that board independence enhances firm value and that the performance impact of board independence is stronger in closely held firms or firms with low dividend payouts.

Chen (2015) investigates how the board structure impacts firm performance, using a World Bank survey of 2400 public and private firms across 18 cities in China. The study provides evidence that more outside directors on the board improve corporate performance, especially where firms operate in a weak property rights environment.

[13] As reported in Dahya and McConnell (2007, p. 540) the following listed countries have adopted a minimum standard for outside board representation: Japan, Kenya, Mexico, Malaysia, New Zealand, Poland, Portugal, Russia, South Africa, Singapore, South Korea, Thailand, Belgium, Brazil, Cyprus, Australia, China, Czech Republic, Denmark, France, India, Indonesia, Iceland, Sweden, Greece and Switzerland.

Liu *at el.* 2015 examine board independence and firm performance in China over a 14-year period (1999–2012). The study provides evidence that independent directors have an overall positive impact on the financial performance of firms in China.

However, there are studies that provide evidence that board independence does not impact on firm performance. For example, Agrawal and Knoeber (1996) examine the relation between seven governance mechanisms among which is the outside board and firm performance using cross-sectional data on a sample of 400 large firms. They estimate both a single mechanism regression and expanded OLS regression in which all of the seven mechanisms were included. They provide evidence of a negative relationship between outside board and firm performance, and show that only the effect of outsiders on the board of directors on performance remain unchanged. They find interdependence in the use of mechanisms (the use of one mechanism may depend on the use of others) and conclude that an empirical estimate of the effect that a single control mechanism has on firm performance will likely be misleading.

Empirical studies that provide evidence for positive relationships

Author (Year)	**Place of study**	**Study period**	**Sample size**	**Performance variable**	**Summary of result**
Cho & Kim (2007)	Korea	1999	347 listed firms	ROA	Find that the rate of outside directors' participation is positive and significantly associated with the firm performance (ROA)
El Mehdi (2007)	Tunisia	2000-2005	240 listed firms	Economic performance (Marginal Q)	Finds that the proportion of outside directors is positively associated with firm performance
Jacking & Johl (2009)	India	2006	180 listed firms	Tobin's Q and ROA	Find that the proportion of outside directors has positive and significant

					impact on firm performance
Satia-Atmaja (2009)	Australia	2000-2005	1530 years' observations	Tobin's Q	Proportion of independent directors on the board is positive and significantly associated with performance
Liu *et al*., (2015)	China	1999-2012	2057 firms	ROA, ROE	Proportion of independent directors on the board has positive and significant effect on firm operating performance (ROA, ROE).

Empirical studies that provide evidence for negative relationship

Kiel & Nicolson (2003)	Australia	1996	348 listed firms	Tobin's Q and ROA	The proportion of outside directors is significant and negatively association with firm performance (Tobin's Q) but insignificant with ROA.
Mangena *et al.,* (2012)	Zimbabwe	2000-2005	157 listed firms	Tobin's Q	The proportion of outside directors is significant and negatively associated with firm performance.

Empirical studies that provide evidence of insignificant relationship

Haniffa & Hudaib (2006)	Malaysia	1996-2000	347 listed companies	Tobin's Q and ROA	Proportion of outside directors has no impact on firm performance (Tobin's Q and ROA)
Ghosh (2006)	India	2003	127 listed manufacturing firms	ROA, Adjusted Tobin's Q	The proportion of outside directors has no significant impact

					on firm performance (ROA, and Adjusted Tobin's Q)
Kajola (2008)	Nigeria	2000-2006	20 listed companies	ROE, Profit Margin (PM)	The proportion of outside directors has no significant impact on firm performance.
Sanda, Mikailu and Garba, (2005)	Nigeria	1996-1999	93 listed companies	Tobin's Q, ROA, ROE, and P/E Ratio	Large proportion of outside directors has no impact on performance.

(Source: Adapted from Owusu, 2012)

Table 4.3: Empirical Studies on the Relationship between Outside Directors and Firm Performance in Other Countries

Bhagat and Black (2002) investigate the relation between board independence and long-term firm performance, on a large sample of US firms over an 11-year period (1985-1995). The study takes into consideration the endogeneity nature of the board structure, and provides evidence that firms suffering from low profitability respond to the challenge by increasing the independence of their board of directors, but does not provide evidence that firms with more independent boards achieve improved profitability. In conclusion, the study does not provide evidence that more board independence improves firm performance.

Hermalin and Weibach (2003) carry out a survey of economic and finance literature on boards of directors. They argue that board structure is endogenously determined, the factor that most empirical studies hardly consider. They conclude that board composition does not impact

firm performance because virtually all the variables of interest involved in estimating the relationship are endogenous.

Kumar and Sivaramakrishman (2008) investigate the impact of board independence on firm value. They argue that CEOs typically control the nomination and re-election of the directors to the board. Having gotten to the board, directors further would become dependent on the CEO, usually because of the benefits that come with board membership. In their study, they show that as directors become less dependent on the CEO, their monitoring efficiency may decrease despite efforts made in improving the incentive efficiency of executive compensation contracts. The authors therefore make the theoretical argument that a board composed of directors that are more independent may actually perform worse.

A possible explanation for the inconsistent results in empirical studies on board independence-performance relationships is that the underlying empirical analyses might have been driven by differences in the methodology approach used by the researchers (Mura, 2007).

4.3.1. Board independence and firm performance in the developed markets

The research on board independence and firm performance is largely dominated by studies conducted in the developed markets such as in the US, UK, Australia etc. In these Anglo-American regions, the separation of ownership from control is relatively predominant as the ownership structure of firms is diffused. Emphasis of this model of corporate governance is that, there should be more of the outsider directors on the board relative to those of the insiders. This is based on the premise that, none-executive directors tend to perform their role with less influence from the executives (i.e. CEO and executive directors); thus, they appear to be effective monitors.

Many of the studies conducted in the US on board composition and firm performance have produced mixed results. For example, Baysinger and Butler (1985) find that the proportion

of independent directors positively correlates with accounting measures of performance. Specifically, they report that the proportion of independent directors in 1970 correlates with the 1980 industry-adjusted return on equity, although their 10-year lag period is very long in terms of any effects of board composition on performance. Other US empirical studies that find positive link between between the proportion of outside directors on the board and firm performance include Weir et al., 2002; Coles et al., 2008 and Gupta & Fields, 2009. In contrast, Klein (1998) and Bhagat and Black (2002) find that a higher proportion of independent directors on the board has no significant impact on firm performance. Klein (1998), however, finds a positive relationship between the percentage of inside directors on the finance and investment committees and accounting measure, as well as the stock market performance measure; while Yermack (1996); Agrawal and Knoeber (1996) demonstrate in their respective study that, the percentage of independent directors on a board has a negative relationship with the market measures of firm performance.

In the UK, a code of corporate governance was first introduced in the late 1980s and early 1990s when corporate governance became the contemporary topic of discussion. The Cadbury Report's (1992) primary concern was the need for the board to be independent of the management and to address the accounting aspects of corporate governance (Johanson & Ostergren (2010). The report also emphasises the need to increase the number of none-executive directors on the board. As part of efforts to reduce the influence of executives on the board, the report (Cadbury Report, 1992) recommended for companies the establishment of three types of committees (i.e. audit, nomination and remuneration committees). The concept of 'board independence' was an important aspect of the Cadbury Report (1992) in the UK and now occupies a central position in the corporate governance codes of most countries including the US where corporate scandals of the early 2000s reinforced the perceived importance of board independence. For example, the NYSE as well as

NASDAQ now require board to be composed by majority of independent directors (Johanson & Ostergren (2010)

Similar mixed empirical evidence was also reported from Australia. In their study, Lawrence and Stapledon (1999) reported that independent directors did not appear to have added value to firms. Similarly, Cotter and Silvester (2003) find no significant association between full board independence and firm value. However, Bonn, Yoshikawa and Phan (2004) find that a higher proportion of independent directors on a board lead to stronger firm performance. Satia-Atmaja (2009) examines six-year panel data of 316 Australia listed companies during the period 2000 to 2005, and finds that, board independence is positively associated with firm value.

In summary, with respect to developed economies, the empirical findings on the relationship between board independence and firm performance are mixed and inconclusive.

4.3.2. Board independence and firm performance in the emerging markets

The impacts of outsider directors' presence on the boards of corporations in relation to firm performance in the emerging markets are expected to differ in some ways from the performance outcome of corporate governance in the developed economies. The divergence in impacts may possibly be due to differences in corporate governance model (Tsamenyi and Uddin, 2008; Mulili and Wong, 2011), even though the choice of corporate governance model largely depends on the ownership structure (e.g. a concentrated, as against diffused ownership structure) or because of differences in the research institutional contexts (Aguilera and Jackson, 2003; Adegbite and Nakajima, 2012; Adegbite, Amaeshi and Nakajima, 2013; Liu et al. 2015; Wijethilake, Ekanayake and Perera, 2015). The reality however is that, most of the emerging markets' studies on corporate governance rarely take into consideration the varying contextual factors pertaining to research settings (i.e. embeddedness of the emerging economies' corporate

governance practices in the larger institutional and legal framework) in their analysis (Adegbite and Nakajima, 2012; Filatotchev, Jackson and Nakajima, 2012; Wijethilake, Ekanayake and Perera, 2015). The implication of such omission (i.e. failure to consider the institutional contexts of the research) is that, there may be very little or no difference in the performance outcomes of corporate governance research between the developed economies and emerging markets based studies.

Several of emerging markets studies that investigate the role of outsider directors on corporate boards in relation to firm performance, in a similar way to those of the developed economies also reveal mixed and inconclusive findings. Some of prior literature based on emerging market data and which find link between the outside directors' presence and firm performance are reviewed as follows: Cho and Kim (2007) investigate the impact of outside directors' presence on the boards of 347 Korean firms in relation to firms' profitability. They find positive, although weak impacts. El Mehdi (2007) examines corporate governance and corporate performance on a sample of 24 listed firms on Tunisian Stock Exchange, during the period. The researcher finds a positive association between the presence of outside directors and firm performance. Lefort and Urzua (2008), using 160 Chilean firms' data, investigate the role of independent directors on the boards of firms with high ownership concentration being an import internal governance mechanism, over a four-year period. They find that, increase in the proportion of outside directors enhances firm value. Their finding further reveals that, companies that present more exacerbated agency conflicts tend to appoint more of professional directors to their boards. Jacking and Johl (2009) examine the impact of board structure on firm performance on a sample of 180 top listed companies in India. They find a positive and significant association between proportion of outside directors and firm performance. Liu et al, 2015 using the GMM methodology explore the relationship between board independence and firm performance in China, over 14-year period. They demonstrate that independent directors have an overall positive effect on firm

operating performance in China. Zattoni et al. (2017) provide a more recent evidence on board independence-performance relationship outside the Anglo-American region. In their cross-country study, they demonstrate that board independence has a positive impact on firm financial performance. However, some other emerging market studies find no relationship between the outside director's presence on corporate boards and firm performance. For example, Ghosh (2006), who examines the relationship between proportion of needs and firm performance of 137 manufacturing companies in India finds no significant impact on the ROA and Adjusted Tobin's Q. Similarly, Haniffa and Hudaib (2006) investigate the relationship between the proportion of NEDs and firm performance on 347 sampled firms listed on Malaysian Stock Exchange. They find that the presence of outside directors on board has no impact on ROA and Tobin's Q.

In summary, as regards emerging economies, the empirical findings on the relationship between board independence and firm performance are also mixed and inconclusive.

4.3.3. Board independence and firm performance in the African markets

Relatively to other board mechanisms, a greater importance is attached to independence of the corporate boards for improving the performance of listed companies in the African markets. Empirical studies on corporate governance in Africa, most especially those that examine the board structure and firm performance, regrettably appear to have little or no consideration for African institutional contexts, and this might be why most studies from this region provide mixed and inconclusive findings like those based on developed economies. A few of African market based studies are also reviewed as follows: Kyereboah-Coleman (2007) investigates corporate governance and firm performance in Africa. Using dynamic panel data methodology on a set of data obtained from 103 listed firms from Ghana, South Africa and Kenya over a period of five

years (1997-2001). This cross-country study finds that, large and independent boards enhance the firm value. Ntim (2011) investigates the association between the presence of Independent Non-executive directors (INEDs) on the board and the market valuation on a sample of 169 listed firms on the Johannesburg Stock Exchange (JSE) in South Africa between 2002 and 2007. The study document a statistically significant and positive relationship between the presence of INEDs and firm valuation. Jenkins (2012), examines the impact of outside directors' experience on firms' value, using data from 150 listed firms on South African exchange over a period between 2003 and 2011. The study uses a mixed research methodology (i.e. combines both qualitative and quantitative methodologies); it finds that, outsider directors' experience is associated with the firm value. The limitation of this study however, is that, its analysis relies more on basic statistical tests rather than a more rigorous regression. Ntim (2012), examines whether South African stock market values a dual board leadership structure. Using a sample of 127 listed firms on the South African stock exchange. The study finds a positive and significant link between a dual board leadership structure and market valuation but only with respect to firms with independent chair persons. This finding implies that the market places greater value on firms with independent dual leadership boards. Mangena et al. (2012) examine the relationship between corporate boards, ownership structure and firm performance of the companies listed on Zimbabwe Stock Exchange during 2000 and 2005. The study however, takes into consideration the institutional context of the research. The researcher documents a negative association between the proportion of non-executive directors and firm performance in a severe political and economic crisis environment.

About board independence in the Nigeria corporate governance, Nigeria is a country in the West African Sub-Sahara Africa region. It obtained independence from Britain in 1960. Prior to independence, the British colonial government put in place in Nigeria an Anglo-Saxon-based system of corporate laws and regulations. After the independence, the 1968 Companies Act replaced the UK Companies Act of 1948. Despite the various reforms, the UK corporate law

remained a huge influence over that of Nigeria (Okike, 2007). Given this situation therefore, the Nigerian corporate governance framework to a large extent appears to be fashioned along that of Anglo-Saxon model (Adegbite and Nakajima, 2011; Angaye and Gwillian, 2008). For instance, the definition of NEDs and distinction between NEDs and 'independent NEDs' as contained in the Cadbury Report (1992) are much alike to those stipulated in the Nigerian Corporate Governance Code. Although, the Higgs Review (2003) extends the definition of independence while the Combined Code of 2008 significantly increased the number of independent NEDs that must be appointed to the corporate board as it prescribes that, half of the board excluding the chairman should be comprised by independent non-executive directors whereas, the Nigerian governance code requires that every company must have at least two independent non-executive directors. This requirement signifies further the importance of the board independence for improving the firm performance.

A review of empirical studies available on board independence and firm financial performance of the Nigerian listed firms document mixed and inconclusive findings as follows: Sanda, Minkailu and Garba (2005) examine corporate governance mechanisms and firm financial performance on a sample of 93 firms listed on Nigerian Stock Exchange over a 4-year period. Using pooled ordinary least squares regression method. Their study however, document no evidence to support the idea that boards with a higher proportion of outside directors perform better than other firms. Kajola (2008) investigates corporate governance and firm performance on a sample of 20 non-financial firms listed on Nigerian Stock exchange, over a 7 year-year period. Using the OLS method of estimation, the study finds no relationship between the proportion of outside directors sitting on the board and firm performance. Ehikioya (2009) investigates corporate governance structure and firm performance in developing economies on 107 sampled firms listed on Nigerian Stock Exchange, over a 5-year period. He finds negative relationship between the number of NEDs and ROA measure of firm performance. Akpan and Amran (2014) who examine

the board characteristics and company performance using 90 sampled firms listed on Nigerian Stock Exchange over a three-year period (2010-2012), find no relationship between board independence and firm turn-over.

4.4. Hypothesis Development

4.4.1. Independent Board-Performance Relationship

A common opinion among researchers is that outside directors provide effective monitoring of the management on behalf of the shareholders. As mentioned in section 4.3.1, this general opinion is based on the premise that the non-executive directors will perform their monitoring role with little or no interference by the executives. Several studies in the market economies find a link between the outsider directors' presence on the board and firm performance (e.g. Weir et al., 2002; Coles et al., 2008; Gupta & Field, 2009; Satia-Atmaja, 2009 etc.) Many emerging economies based studies similarly report that positive relations exist between board independence and firm performance (e.g. Cho and Kim, 2007; Lefort and Urzua, 2008; Chen, 2015; Liu et al., 2015; etc.) and as well many African market based literature on corporate governance find a link between independent boards and firm performance (e.g. Kyereboah-Coleman, 2007; Ntim, 2011; Ntim, 2012; Jenkins, 2012 etc)

In contrast, arguments against this opinion have also been put forward. For example, a view that, outside directors may owe their position to the management (Hart, 1995); and much later, there has been an argument that, informality may surround the process of appointing non-executive directors, as it was the case in the UK (Higgs Report, 2003). In the Nigerian context, similar allegations have also been made that directors' appointment to corporate boards is based on personal relationships with the CEO rather than personal ability of the individuals involved (Tennygee, 2013). Jensen (1993) also argues that the ability to effectively monitor the executive management may be inhibited where the non-executive directors lack the required expertise. With

respect to large boards, Jensen (1993) argues that the CEO's influence may overwhelm that of the outside directors, as large boards are easier for CEOs to control. Therefore, given these shortcomings, there might not be a positive association between the presence of outside directors on the board and firm performance.

Notwithstanding these criticisms, the best corporate governance practices as exemplified by those of the UK and US respectively appear to lean towards encouraging the inclusion of more of the outside directors on corporate boards for effective monitoring. For example, in the UK, the Cadbury report (1992) requires that at least three non-executives be on the board; the Hampel Report (1998) requires that at least one third of the board be non-executives; and the Higgs Report (2003) requires at least fifty per cent of the entire board be composed of non-executive directors. The prescriptions by these codes work on a 'comply or explain' basis, meaning that in line with the requirement of the London Stock Exchange, adherence to these recommendations is not compulsory, but companies would need to explain in their annual reports the reason for non-compliance. Similarly, in the US, since the year 2000, there have been some significant changes in corporate governance. For example, Sarbanes-Oxley contained several requirements that increase the workload of and demand for outside directors on the board (Adams *et al.*, 2010) despite that, prior to this, the corporate boards in the US had become outsider-dominated (Lehn *et al.*, 2009). Although Nigerian corporate governance code recommends a minimum of one outside director on the firm's board (SEC code, 2011), but the reality is that, the inclusion of more outside directors in the corporate board membership has just begun as a common feature of Nigerian' corporate boards structure. Furthermore, the practice of having more outside directors on corporate boards is now increasingly becoming a global trend. For example, besides the UK governance codes and the U.S NYSE and Sarbanes-Oxley requirements for more outside directors on boards, as reported in Liu et al., (2015), many countries in the emerging economies are now also adopting a minimum standard for outsider board representation with the hope that this will improve more

the board's efficiency, transparency, monitoring and overall effectiveness (please see sections 4.3 to 4.3.3). The agency theoretical argument is also in support of this proposition. For example, Fama and Jensen (1983) contend that concern about their own reputation and future careers might create enough incentive to make outside directors effective monitors.

Given the arguments presented above and findings in the previous empirical studies as discussed in section 4.3., a positive relation is therefore expected between the presence of outside directors on the board and firm performance, irrespective of their share ownership. The study therefore proposes hypothesis as follows:

H1: The presence of independent directors on the corporate board is positively associated with firm performance.

4.4.2. Board Independence – Concentrated Ownership Relationship.

The general opinion in the literature is that the presence of large shareholders may help improve corporate governance in the firm. Blockholders do hold a significant proportion of the firm's equity, thus they have an incentive to obtain information and monitor managers (Shleifer & Vishny, 1997). They may force the management to act in the best interest of shareholders. As their ownership level increases, large controlling shareholders may however engage in minority shareholders' expropriation (Faccio, Lang & Young, 2001). To consolidate and elongate their opportunistic activities in the firm, large stockholders may prefer fewer independent directors to sit on the board. However, the presence of more independent directors on the board may help keep a check on the minority shareholders' expropriation by the controlling shareholders. In fact, Anderson and Reeb (2004) contend that the interests of minority shareholders are best protected when independent directors have more power relative to that of the controlling block holders. A suggestion from the agency theory perspective is that the blockholders may engage in rent extraction for their private interests and not likely support the decision to have an independent

board, as this may potentially limit their control of the firm (Jensen and Meckline, 1976). Besides theoretical suggestion, pattern of incongruence between an independent board and concentrated ownership have also been demonstrated in prior empirical studies. For example, Cotter and Silvester (2003) provide evidence that board independence in Australian listed firms is associated with low management ownership and an absence of blockholders. Similarly, Anderson and Reeb's (2004) findings show that family blockholders in large US firms prefer a limited presence of independent directors on the board. In a similar fashion, Kim, Kitsabunnarat-Chatjuthamard, and Nofsinger's (2007) study on 14 European countries find a negative relationship between ownership concentration and board independence.

Therefore, based on the foregoing discussion and findings in the prior studies, one would not expect a positive association between independent directors and ownership concentration. The study therefore proposes a hypothesis to test the effect of ownership concentration on board independence as follows:

H2: There is a negative association between the independence of the corporate board and ownership concentration

4.4.3. The Moderation Effect of Ownership Concentration

The impact of many important governance mechanisms on performance depends largely on firms' ownership structure (Bebchuk & Hamdani, 2009). Ownership concentration is widely believed to possibly have a considerable impact on corporate governance, as it may mitigate or exacerbate agency problems in the firm. In section 6.3.1, the study finds that board independence has a positive impact on performance. However, the question is whether this positive relationship is moderated by ownership concentration. In this section of the chapter therefore, the study

examines whether the impact of board's independence on firms' performance is significantly influenced by their ownership structure.

It has been argued in the literature (e.g. Satia-Atmaja, 2009) that ownership concentration can influence board independence. It is therefore, arguable that, ownership concentration can moderate the role of board in corporate governance. However, one may tend to raise doubt as to if independent directors could really be an effective governance mechanism in the presence of dominant shareholders?

There available empirical studies on the monitoring role of independent directors in the firm with different ownership structures; they however provide inconclusive evidence. For example, Anderson and Reeb (2004), who examine board composition with respect to family influence in the US S&P 500 firms; they find that family firms outperformed non-family firms only when family firms have a relatively strong board. In an empirical study of Canadian public firms, Erickson, Park, Reising and Shin (2005) examine the relationship between board composition and firm performance in the presence of concentrated ownership; they provide evidence that greater board independence however, does not have a positive impact on firm value. Dahya, Dimitrov and McConnell (2008) also examine the relationship between the proportion of independent directors on the board and firm value with dominant shareholders across 22 countries; they however, find a positive association between this governance mechanism and firm performance, especially in countries with weak legal shareholder protection.

Based on Anderson and Reeb (2004) and Dahya, Dimitrov and McConnell (2008) the study proposes hypothesis to test whether the impact of board independence on performance differs between closely-held and widely-held companies.

H3: The impact of board independence on firm performance is stronger in closely-held than in widely-held firms.

4.5. The Firm's Ownership Structure

Ownership structure is one of the most important aspects of corporate governance studies as it determines who has the ultimate decision-making power in the firm. The firm's ownership structure is multidimensional as it can be analysed along various dimensions such as the concentration of shareholders, the identity of shareholders and the divergence between ownership and control rights (Kumar and Zattoni, 2015). In this study, the ownership structure and how it affects firm performance is thus discussed along these dimensions.

4.5.1. Ownership Concentration and Firm Performance

Except for within market economies such as those of the UK and US where the ownership of corporations is dispersed, a concentrated ownership is the norm around the globe (La Porta *et al.*, 1999). Firms with a dispersed ownership structure generally lack powerful shareholders, and consequently face a principal-agent problem, as the managers can pursue their own interests at the detriment to shareholders (Aslan and Kumar, 2014). The major weakness of dispersed ownership, therefore, is that dispersed owners lack both the motive and the means to address managerial agency problems in the firm, such as: owner-manager interest misalignment, problems associated with managerial opportunism, and information asymmetry, to mention just a few (Heugens *et al.*, 2008). In the dispersed ownership environment, in which the principals typically are unwilling and unable to carry out effective monitoring of the publicly listed firms, the market for control, equity capital and executive talent are usually the primary disciplinary forces that keep checks on managers (Walsh & Seward, 1990; Gillan, 2006). In developing economies, where such markets are underdeveloped, the investors' only choice is to act as a monitor of the firms. They can effectively do this, only by concentrating their equity shares' holdings (Heugens *et al.*, 2008).

Agency theory suggests that concentrated ownership will ensure more effective monitoring of the management and thus lead to improved performance (Satia-Atmaja, 2009). Concentrated ownership on the other hand may become a disincentive to performance (Satia-Atmaja, 2009). The concentrated ownership strategy provides the investors with the opportunity to carry out effective monitoring directly on the managers. The investors' presence can stimulate or coerce the firm leadership to work in the investors' best interest. Where the relationship is relatively cordial, concentrated shareholders can use their vast resources and knowledge to enhance managerial and organisational capabilities (Carney & Gedajlovic, 2001). In times of crisis, wealthy concentrated owners may choose to use their private resources to bail out an ailing firm (Friedman *et al.,* 2003). Therefore, a positive relationship would normally be expected between ownership concentration and firm performance, particularly in the context of developing economies (Heugens *et al.,* 2009). Several studies (e.g. Shleifer and Vishny, 1986; McConnell and Servaes, 1990; Zinggales, 1994) find a strong positive relation between ownership concentration and corporate performance in the US and other market economies, and this can be attributed to the impact of better monitoring.

However, a number of other empirical studies' reports indicate to the contrary. For example, Demsetz and Lehn (1985) and Himmelberg *et al*. (1999) respectively show that concentrated ownership is not associated with better operating performance or higher firm valuation. Himmelberg *et al*. (1999) cast doubts on previous findings that show such relationships. They contend that the observed empirical relationships between ownership and performance might have been the result of unobservable firm heterogeneity, which may affect both ownership concentration and firm value. Accordingly, these unobserved exogenous firm characteristics might induce a spurious relationship between Tobin's Q and ownership concentration. In line with these findings, Chen *et al.* (2005) in their study of 412 publicly-listed Hong Kong firms during 1995-1998 also do not find a positive relationship between family ownership and proxies for firm

performance. Claessens *et al*. (2000) find little evidence on the relationship between ownership concentration and performance in their study on South East Asian countries, even though many such economies are characterised by a huge family ownership of listed firms.

As mentioned earlier, an alternative to concentrated ownership structure is diffuse ownership as advocated in early studies such as that of Berle and Means (1932). In their study of the image of ownership of the modern corporation in the United States, the ownership of capital is dispersed and control is concentrated in the hands of managers who are rarely accountable to shareholders. However, several studies since (e.g. Shleifer and Vishny, 1986; Demsetz, H., & Lehn. K, 1985) have begun to question the empirical validity of this image. A diffused ownership structure has its own shortcomings. In a situation in which ownership is largely diffused to monitor managers, corporate assets may be diverted for the benefit of managers rather than for maximizing the firm's value. Jensen and Meckling (1976) argue that managers with a low level of ownership are unable to maximize shareholders' wealth because they have an incentive to consume perquisites. In addition to perquisites, the non-monetary benefits derivable by managers may encompass pursuing non-value maximizing objectives such as sales growth, empire building and employees' welfare (Morck, Shleifer and Vishny, 1988). In order to address this agency problem, managers may be given equity stakes in the firms. This thus helps to resolve the moral hazard problem by aligning the interests of managers with those of the shareholders (Himmelberg *et al.*, 1999). In a context where a corporation is controlled by large shareholders, the controlling shareholders may not only address the opportunistic behaviour by top management but also try to expropriate minority shareholders (Young *et al*., 2008). In the presence of dominant shareholders therefore, there is the risk of an emergence of 'principal-principal' conflicts (another agency problem type 2). The ownership characteristic and its effects on firm performance next to be discussed is the identity of the shareholders.

4.5.2. The Identity of Shareholders

This section reviews the identity of the shareholders. It discusses who the owners are and how much they each own of the corporation. As the ownership concentration determines the power of shareholders to influence managers, the identity of the owners has implications for their objectives and the way they exercise their power (Thomsen & Conyon, 2012). The shareholders' identity influences their economic interests and decision-making (Kumar and Zattoni, 2015). The economic view of the firm is that the board of director maximizes shareholders' value. The purpose of corporate governance is to align the interest of the owners (shareholders) with management. However, shareholders are not a homogenous group. The presence of heterogeneous shareholders has implications for exercising effective control of the firm by shareholders (Larcker and Tayan, 2011). Shareholders are different from one another in many areas, for example with respect to their objectives and preferences; differences in their scale and sizes of shares holding; differences in their types (e.g. institutional investors, block-holders, corporations, etc.).

The following are typically the most common ownership structures (shareholders' categories).

Outside blockholders' ownership

An investor that owns a large amount of stock is referred to as a block-holder. The block-holders normally hold a significant proportion of the firm's equity. Their presence may help improve corporate governance as they have the incentive to monitor management (Shleifer & Vishny, 1997). The block-holders may also force management to act in the interest of shareholders by using their voting power (La Porta *et al.,* 1999). Large block-holders can exert a potential takeover threat, which serves as an effective device for monitoring the management (McConnell and Servaes, 1990). Unlike the small shareholders, the block-holders who consume a larger proportion of the firm's wealth that results from takeover can benefit from costly monitoring.

Based on this, Shleifer and Vishny (1997) argue that the presence of a large block-holder of the firm's equity shares will have a positive effect on the market value of the firm.

The greater the level of concentration in the hands of outside shareholders, the more effectively management behaviour is monitored and disciplined (Demtsetz and Villalonga, 2001). However, in a concentrated ownership setting, ownership is combined with control; this, according to literature (e.g. Fama & Jensen, 1983; Shleifer & Vishny, 1997), may allow the concentrated shareholders to exchange profits for private rents. The literature also suggests that, in controlling block-holders, seeking to extract rent for their private benefits will be unlikely to have boards or audit committees that can put a check to their excesses (e.g. Satia-Atmaja, 2009).

Several pieces of research have reported a positive association between large equity (block-holders) ownership and firm performance. For example, Mikkelson and Rubback (1985), Holderness and Sheehan (1985) and Barclay and Holderness (1990) all provide evidence of positive excess returns around the announcement of large equity acquisition by the outsiders. Their respective evidence is consistent with Shleifer and Vishny's (1986) contention, and their characteristics vis-à-vis their impacts on firm performance.

Executive Management Ownership

Insider ownership is also sometimes referred to as management ownership. Insider investors are the individuals or groups who combine substantial equity holdings with direct managerial control over the firm (Fama & Jensen, 1983). Inside owners can be professional managers who have been given a substantial ownership stake in the firm. In Asia, they tend to consist of corporate founders and their immediate families (Heugens *et al*., 2009).

Jensen and Meckling (1976) in their study examine the relationship between managerial ownership and the firm value. They note that conflicts of interest usually arise between the owner-

managers (inside shareholders) and the outside shareholders. They remark that the inside shareholder who manages the firm is entitled to dividends per share of stock held in the same manner as that of an outside shareholder. In addition, inside shareholders are also able to augment this stream of cashflow by consuming additional nonmarketable perquisites. Jensen and Meckling (1976) argue that as an inside shareholder's fraction of the equity falls, his fractional claim on the firm's outcomes falls, and that this will tend to encourage him to appropriate a larger proportion of the corporate resources in the form of perquisites.

The agency problem between the insider shareholder (owner-manager) and outside shareholders is not limited to his tendency to appropriate perquisites out of the firm's resources for his own consumption nor is the most important. The most likely important agency conflict, according to Jensen and Meckling (1976), is that which arises from when the manager's ownership claim falls, his incentive to devote significant efforts to creative activities also falls. Therefore, Jensen and Meckling (1976) argue the firm's value depends on the proportion of shares owned by insiders. The greater the percentage of shares owned by the insiders, the greater the value of the firm.

It has been argued (e.g. Mock *et al*., 1988) that when a manager owns a small fraction of the firm's equity, market discipline (e.g. the market for corporate control {Jensen and Ruback, 1983}) may force him to ensure value maximization. However, the manager's position may become entrenched when he controls a substantial proportion of the firm's equity as he may have enough voting power to guarantee his job. The entrenchment hypothesis therefore suggests that a high managerial stake in the firm's equity may result in low market valuation of the firm's stock (Mock *et al.,* 1988).

Stulz (1988) examines the managerial control of voting rights, financing policies and the market for control. His work centres on the importance of the takeover market for disciplining

corporate managers. He argues that the probability of a successful hostile takeover for any given premium declines as managerial ownership of equity increases. He finds a curvilinear relationship between the fraction of shares owned by insiders and the firm's value. He provides evidence that as managerial equity ownership increases, so the value of the firm first increases and then decreases.

Morck, Shleifer and Vishny (1988) investigate the relationship between management ownership and market valuation of the firm. They argue that with low ownership equity stake, the managers naturally tend to allocate resources in their own best interests. This may conflict with the outside shareholders' interests as managers have incentives to adopt investment and finance policies that benefit themselves. Thus, given this framework the relationship between managerial equity holding and firm value is negative. However, as the management equity ownership increases, their interests are likely to be in congruence with those of the outside shareholders and this invariably results in having a positive impact on the firm's value. Morck, Shleifer and Vishny (1988) find evidence of a significant non-monotonic relationship between managerial equity ownership and firm value. They argue in line with Stulz (1988) that firm value varies with the level of managerial equity ownership; thus, the determination of the relationship between corporate value and ownership structure is for them an empirical issue.

Facio and Lasfer (1999) examine managerial ownership, board structure and firm value on a sample of 1650 UK firms during the period 1996 and 1997. Prior US-based evidence (e.g. Hermalin and Weibatch, 1991; McConnell and Servaes, 1990; Morck, Shleifer and Vishnny, 1988) reveals a non-monotonic relationship between the managerial ownership and firm value, the result attributable entrenchment effect. Several previous studies document management entrenchment characteristics. For example, Fama (1980) and Jensen (1986) argue that since managers may tend to protect their under-diversified wealth and reduce the pressure to pay out a large amount of cash,

they may limit the use of debt capital. Manager may strengthen their power by increasing the firm's size beyond the optimal level (Jensen, 1976) or may diversify so as to become more indispensable of their firms (Morck, Shleifer and Vishny, 1990). Prior studies (Hamalin and Weibatch, 1991; Jensen, 1993) suggest, as the managerial ownership increases, the likelihood of having non-executive directors on the board diminishes.

Facio and Lasfer (1999) further extends knowledge about the entrenchment effects of the managerial ownership in relation to firm value. They do this by testing the entrenchment hypothesis in two ways. First, whether high managerial ownership leads the CEO to create a board structure that is unlikely to monitor (e.g. where the positions of the CEO and board chair are held by one person; the proportion of non-executive directors is reduced). Second, estimating the relationship between managerial ownership and firm performance while controlling for the impact of different monitoring devices on firm value. Their findings reveal the relationship between managerial ownership, the split of the roles of the board's chair and CEO and the appointment of the non-executives as board's chair is an inversed-u-shaped, with an optimal level of managerial holding of 12 per cent. Although the result is consistent with the entrenchment hypothesis through managerial control of the board, but the overall finding is that, managerial ownership does not have any impact on firm value.

Demsetz and Villalonga (2001), examining the ownership structure and corporate performance of 511 firms from all sectors of the US economy in 1980, found no statistically significant relationships between ownership structure and firm performance. Demsetz (1983) argues that the ownership structure of a firm should be thought of as an endogenous outcome of decisions that reflect the influence of the shareholders and of the market. Demsetz and Villalonga (2001) argue in a similar direction. They contend that the firm's ownership structure reflects the decisions of both the firm's existing and potential shareholders, and that the ownership structure

that emerges should be influenced by the profit maximising interest of these shareholders. When the existing shareholders decide to sell their shares and potential shareholders agree to buy them, they are invariably taking a decision to alter the ownership structure of their firms, and such a decision is reflected in the subsequent trading of those shares. Demsetz and Villalonga (2001) therefore conclude that there should be no systematic relation between the ownership structure and firm performance.

Institutional investors' ownership

Institutional investors are organizations that invest large amounts of money on behalf of others in order to provide financial services to them. Institutional investors are the dominant form of corporate ownership, especially in market-based economies such as the US and UK. They include pension funds, insurance companies, mutual funds and other investment companies. Institutional investors influence corporate governance and can do this because of their overall size and general interest in the stock market, which enables them to compare companies and if necessary sanction any badly behaved firms by excluding them from their portfolio (Thomsen & Conyon, 2012).

The relationship between corporate value and institutional ownership is a relatively less explored aspect of corporate governance (McConnell and Servaes, 1990). There is a globally shifting trend since the late 20th century in the pattern of firm ownership, in which individual share ownership is declining whilst ownership of shares by institutions is rising, which is a pointer to the significance of the role of institutional investors in corporate governance. Especially with the internalization of cross-border portfolios and the spate of financial crises in many parts of the world, there is a growing need for institutional investors to be more actively involved in corporate governance (Mallin, 2010). Because of their size and collective stake, institutions have the ability to influence the actions of companies. In particular, they are in a position to use their influence as

owners to ensure that companies in which they invest comply with the corporate governance codes (Cadbury, 1992).

These institutions in general are expected to shake off their traditional apathy and play more of an active role in the governance of companies in which they invest. The institutions however face two major constraints. Firstly, some institutions do not see themselves as owners of the firm; rather they see themselves as investors, viewing equity shares as a short-term tradeable investment vehicle[14]. Such institutions do not therefore want to accept any responsibility as shareholders (Charkham, 1990). Secondly, the expectation is that institutions will take on the role of the large shareholder, monitoring management on behalf of small shareholders. In this framework, it is expected that institutions will take a long-term view of their shareholding positions, and where necessary incur intervening expenses in correcting mismanagement. The constraint however is that, given stiff competition in the market place and as investors, they need to be free to move funds around in order to find the best returns on their clients funds; it is difficult to argue that institutions (e.g. funds managers) should continue to tie down funds in problematic companies and incur additional expenses for intervening when there is no guarantee that such an intervention will be successful (Keasey *et al*., 2005). Given its covert nature, it is very difficult to examine the precise extent to which institutions intervene in neither the governance of corporations nor the effect of any intervention.

Pound (1988) presents three hypotheses for explaining the relationship between institutions and their incentives to intervene in the corporate governance of the companies in which they invest. The efficient monitoring hypothesis suggests that institutional investors are more informed and have greater expertise to monitor management at lower cost than small shareholders.

[14] Drucker (1976. P.82) argues: "The pension funds are not 'owners', they are investors. They do not want control…… The pension funds are trustees. It is their job to invest the beneficiaries' money in the most profitable investment. They have no business trying to 'manage'. If they do not like a company or its management, their duty is to sell the stock".

The conflict of interest hypothesis suggests that institutional investors may have (current or potential) business relationships with the company, which makes them less willing to cut short the excesses of the company's management. The strategic-alignment hypothesis suggests that institutional investors and the managers may find it mutually advantageous to cooperate on certain issues. Thus, while the efficient monitoring hypothesis predicts a positive relation between institutional ownership and corporate value, both the conflict of interest and the strategic-alignment hypotheses predict a negative relation between institutional ownership and corporate value.

Empirical evidence on the relationship between institutional ownership and corporate value also provides mixed results. Brickley, Lease and Smith (1988) examine the institutional voting patterns in management initiated anti-takeover amendments. They provide evidence that institutional shareholders vote more actively on anti-takeover amendments than other shareholders do. Pound (1988) examined proxy contests and provides evidence suggesting that institutions do not act as efficient monitors, but that institutions are more likely to vote in favour of the management. Faccio and Lasfer (2000) analyse the monitoring role of occupational pension funds in the UK. They find no evidence to support the view that occupational pension funds act as effective monitors.

Corporate ownership

Corporate ownership – i.e. ownership by other larger firms or conglomerates and especially multinationals – might be explained by the need for business integration. A vertical or horizontal tie between companies at different stages of the value chain is an important aspect in running business groups.

Although business groups abound all over the globe, they are relatively more common in emerging economies. A business group is "a collection of legally independent firms that are bound by economic (such as ownership, financial and commercial) and social (such as family, kinship and friendship) ties" (Yiu *et al.*, 2005, p.183-206). In business groups, informal ties such as board interlocks, co-ordinated actions and cross-holdings are strong (Chung, 2006). Business groups' primary advantages in emerging economies include the fact that they are substitutes for weak institutional environments with respect to capital, labour, and product markets which may provide some form of competitive advantage (Li *et al*., 2006; Wan, 2005).

There are several shortcomings of business groups regarding corporate governance. For instance, low transparency among the affiliated business groups; lack of transparency may make it difficult for minority shareholders to determine where control resides. Collusion and unethical conducts among the affiliated firms may make it difficult for minority shareholders to identify and challenge unfair intra-group transactions (Chang, 2003). The affiliation among the group provides the opportunity for the controlling shareholders to expand control and thrive in the expropriation of minority shareholders, which is one of the major causes of principal-principal conflicts (Khanna and Rivkin, 2001). Business groups promote 'pyramiding', a system whereby a controlling owner sits atop other member firms through a chain of ownership, and exercises control over a firm indirectly through other firms. It is common through pyramid ownership for the ultimate owners to have formal control rights that are greater than ownership (cash flow) rights, which increases the opportunity for the minority shareholders' expropriation by the controlling shareholder (Faccio *et al*., 2001).

4.5.3. The Endogeneity of ownership Structure

It has been argued in the literature (Demsetz and Villalonga, 2001; Hermalin and Weisbach, 1988) that firm ownership structure is endogenously determined. In a similar manner

to board composition where ownership structure affects firm performance, so firm performance also affects ownership. For example, Demsetz and Villalonga (2001) argue that given considerations such as insider information and performance-based compensation, firm performance is likely to affect ownership structure, as ownership structure is likely to affect firm performance. Management compensation in the form of stock options is an example of possible reverse causation in which firm performance affects ownership structure (Demsetz and Villalonga, 2001). The implication is that endogeneity must be considered when assessing the relationship between ownership and firm performance.

The empirical evidence on the relationship between firm ownership and performance also provides mixed results. Morck *et al.* (1988) examine the relation between managerial ownership and performance using 1980 cross section data of 371 Fortune firms. The results of their estimate of a piecewise-linear regression gave a significant non-monotonic relation in which Tobin's Q increases and then decreases with managerial ownership.

McConnell and Servaes (1990) examine the relation between corporate value and insider and block-holder ownership. They find a positive relation for insider ownership and positive but insignificant relations between block-holders and performance. Hermalin and Weisbach (1991) examine 142 NYSE firms. Their findings are that Tobin's Q rises with ownership up to a stake of 1% The relation is negative within 1-5% ownership range, becomes positive again within ownership range of 5-20% and becomes negative for a level of ownership exceeding 20%. Holderness *et al.* (1999) replicate the 1935 and 1995 central aspect of the study by Morck *et al.* (1988) and Demsetz and Lehn. Like Morck *et al.*, they find significant positive relations between firm performance and managerial ownership within the range 0-5% ownership but unlike them they do not find a statistically significant relation above 5% managerial shareholdings. They treat managerial ownership as endogenous variables. Demsetz and Villalonga (2001) investigate the

relation between ownership structure and firm performance, treating ownership as an endogenous variable. They find no statistically significant relation between ownership structure and firm performance. Satia-Atmaja (2009) examines the impact of ownership concentration and firm value, using panel data on a sample of public Australian firms over a 2000-2005 period. He finds that ownership concentration has a negative impact on board independence.

These studies report mixed findings. Differences across these studies may arise due to differences in measurements, sampling, the techniques used in carrying out the estimates and more importantly whether endogeneity is considered. In this study, recognition is given to the fact that shareholders hold ownership with different interests. Therefore, the shares held by outside shareholders and by the management are measured separately, as different ownership produces different results.

4.6. Hypothesis Development

4.6.1. Executive Directors' Ownership-Performance Relationship

With a dispersed ownership structure, as argued by Berle and Means (1932), it may become necessary to run firms by people other than the owners (the managers), especially where the firm transitions from the owner-managed threshold to a fully-fledged publicly listed company[15]. Regarding the Nigerian economy and as is common with most emerging economies, a concentrated ownership structure is the norm (La Porta, Lopez-De-Silanes & Shleifer, 1999). Some of the companies listed on the Nigerian Stock Exchange commenced as owner-managed firms before they were listed. One of the cardinal objectives of the privatization and commercialization programme in Nigeria which is still ongoing is to encourage core/strategic investors with technical and managerial capabilities to take up significant equity ownership of the

[15] Some of the companies in Nigeria started as founder-managed firms and got listed on the Nigerian Stock Exchange.

firm. It is hoped that such new developments would lead to the improved performance, overall efficiency and viability of such firms (GPCP, 1998). Given this objective, people with the required technical knowledge are not only encouraged to run firms but also invest in them.

Several arguments have been made against the notion that, managerial ownership enhances firm value. One of these arguments is that, a higher managerial equity stake may not lead to maximization of the shareholders' value. As discussed in section 3.2.1.2., when the manager's equity stake in the firm increases, this also gives the manager greater voting power and control, which he may use to expropriate resources as manager becomes entrenched (Fama and Jensen, 1983; Demsetz and Lehn, 1985). Furthermore, Facio and Lasfer (1999) also argue in this direction that, the managerial entrenchment that rises correspondingly with higher managerial ownership may be thought of consequences attributable to three major factors. First, high managerial ownership may encourage the CEO to create a board that is unlikely to monitor (Jensen, 1993). Second, higher concentration of managerial ownership may make hostile take-over less possible (Stulz, 1988). Third, Hirshleifer and Thakor (1994) are of opinion that, the board may be rendered ineffective where the possibility of an external market discipline is low due to unavailability of vital information that is being generated by the take-over market.

Many arguments to the contrary have also been put forward, as discussed below. In line with agency theory, when managers in a firm hold a substantial equity stake, their roles may have implications for corporate governance and thus the firm's valuation. As Jensen and Meckling (1976) argue, when managers hold little or no equity stake in the firm, managers may deploy the firm's assets for their personal benefit rather than for that of the shareholders. They argue further that managers are more likely to squander corporate assets when they bear little or no costs arising from pursuing their non-value-maximizing objectives. Aside from the managers' tendency to divert corporate assets for their personal benefit, especially via the consumption of perquisites,

managers may also adopt policies that benefit them as against those which benefit the firm. However, as the management equity ownership stake rises, the managers' share of the costs of deviation from value-maximization also rises; managers hence would tend to work towards a maximization of the firm's value (Jensen and Merckling, 1976).

Agency theory suggests that an increased managerial ownership stake may help align the interests of the managers with those of the shareholders, and which may therefore bring about a rise in the firm's market value (Jensen and Merckling, 1976). The theory predicts a rise in the firm's market value when the interests of the manager are aligned with those of the shareholders. For example, when a manager holds a fraction of the firm's equity stake in the corporation, the manager becomes more committed to the success of the firm and hence would be willing to engage in activities that facilitate the realisation of value-maximization. Accordingly, one would expect a positive relation between managerial ownership and performance.

Therefore, based on the above discussion and relying more on agency theoretical position on the impacts of this governing mechanism on firm performance, a hypothesis is proposed as follows:

H4: There is a positive association between executive directors' equity share ownership and the performance of Nigerian listed firms.

4.6.2. Non-Executive Directors' Ownership-Performance Relationship

The board of directors is appointed by the shareholders to keep any 'self-serving' behaviour of the management in check. The executives who are on the board of course would not be the true monitors. The non-executive directors are generally regarded as outsider directors and are expected to be objective monitors of the management. As mentioned earlier in section 4.4.1,

in recent years, regulators around the world have been increasingly advocating for the inclusion of more outside directors on corporate boards. The need for more non-executive directors on the board for example is emphasised by the Higgs Report (2003) in the UK and by both the NYSE and NASDAQ requirements in the US. The Nigerian Security and Exchange Commission through the corporate governance code similarly encourages the appointment of more outside directors to the boards of Nigerian listed firms (SEC code, 2011).

However, unlike the executive directors on the board, non-executive directors do not earn salaries nor enjoy corporate perquisites. Some researchers (e.g. Fama and Jensen, 1983) maintain that concern for their reputation and future career opportunities are sufficient to make non-executive directors efficient monitors. Several others, however, express doubt as to the effectiveness of non-executive directors in performing a monitoring role, in the absence of adequate incentives. They argue that non-executive directors can be motivated to act in the best interest of the shareholders only if they hold significant shares in the firm (Morck, Shleifer and Vishny, 1988). The reality however, is that only a few papers have examined the impact of share ownership by non-executive directors on firm performance. The study seeks to examine whether equity ownership has any relationship with their monitoring role. The study therefore proposes a hypothesis on the issue as follows:

H5: There is a positive association between share ownership by non-executive directors and firm performance.

4.6.3. Institutional Ownership-Performance Relationship

An institutional investor refers to an entity that uses pooled funds to purchase securities, real estate and other investment assets. Institutional investors in the context of this study include financial institutions such as banks, pension and hedge funds, insurance companies, mutual funds and other corporate investors that usually invest in significant proportions of the firms' equity

stocks. The primary objective of many institutional investors is to invest funds on behalf of their clients in profitable and possibly bluechip companies' equity shares and provide them with the best returns on such investments. Given that institutional investors usually hold controlling equity shares in the firm, the common opinion is that they have the incentive and would be willing to be actively involved in the corporate governance of those firms in which they have investment.

The role of institutional investors in corporate governance is relatively less explored, though the trend is gradually changing globally as ownership in many economies is moving toward diverse ownership. In the UK, the Cadbury Report (1992), Hampel Report (1998) and Higgs Report (2003) each contain specific recommendations that encourage the participation of institutional investors in corporate governance. Institutional investor ownership is relatively high, and as they can use their influence to ensure that the firms in which they invest comply with the corporate governance codes, thus they are expected to be more actively involved in firms' corporate governance (Mallin, 2010). In recognition of the important role that the institutional investors play in corporate governance, the Nigerian corporate governance code provides that "shareholders of public companies should play a key role in good corporate governance. In particular, institutional shareholders and other shareholders with large holdings should seek to influence positively the standard of corporate governance in the companies in which they invest. They should demand compliance with the principles and provisions of this code. They should seek explanations whenever they observe non-compliance with the code" (SEC code, 2011. p.33).

McConnell and Servaes (1990) provide evidence of a positive and significant relationship between institutional investor ownership and performance in the US. Almazan, Hartzell and Starks (2005) report that the presence of active institutions is associated with improved performance, which suggests that institutional investors are effective monitors. Al-Najjar (2015) who examines the effect of institutional ownership on performance of Jordanian listed firms provides evidence

of a positive and significant relationship between institutional ownership and accounting firm performance.

However, institutional investors face two main challenges. One challenge is that institutions such as pension funds, insurance companies and investment companies more often view themselves as investors and not as shareholders. They therefore do not consider themselves as owners and may not wish to take up the responsibility of monitoring the management on behalf of small shareholders (Charkham, 1994). Another challenge is that investors prefer to have the freedom of moving funds around rather than tying down funds as they seek to give their clients the best returns. More importantly, they also may not wish to bear the cost of intervening that is attached to monitoring (Keasey, Thompson, S & Wright, 2005). Institutional investors therefore more often are perceived to be too passive and are not regarded as effective monitors. Some of the previous studies provide evidence in this direction. Plender (1997) notes that UK institutional investors have significant voting power but rarely exercise it. Goergen and Renneboog (2001) provide evidence that institutional investors' passive approach enhances an already enormous power of the directors. Furthermore, Faccio and Lasfer (2000) find that the UK pension funds are not effective monitors.

In view of the growing concern about the passiveness of institutional investors as against their active engagement in the firm's corporate governance, one would expect to find either an insignificant or negative association between institutional ownership and firm performance. The study therefore proposes the hypothesis as follows:

H6: There is a negative relationship between institutional ownership and firm performance.

4.6.4. Non-Institutional (Blockholders)' Ownership-Performance Relationship

In section 4.5.2, the outside blockholders' ownership is discussed. An investor that holds a large amount of stock is referred to as blockholder. The Non-institutional blockholders comprise of private individuals and non-financial companies, that hold large amount of equity shares (3 per cent and above position). Large shareholders play an important role in ensuring the effective running of corporations. Their corporate governance role may help considerably in resolving principal-agent conflict of interest problems in the corporation. As discussed in section 4.5.1, the view commonly held is that a concentrated ownership offers the best protection to shareholders where the legal protection is relatively weak (Heugens, Essen and Oosterhout, 2009), as is the case in most non-market economies. Ownership concentration is a widely-used governance strategy in emerging economies because the necessary institutions that are expected to provide support towards effectively running the economy are either absent or not functioning properly (Young *et al.*, 2008; Heugens, Essen and Oosterhout, 2009; Claessens and Yurtoglu, 2013).

A concentrated ownership enables large investors to exert direct influence on the managers in the running of firms (Bolton and von Thadden, 1998; Coffee, 1991). An argument has also been put forward that investors with a large ownership stake have strong incentives to collect valuable information and may help monitor managers and put pressure on them, or fire them through a takeover (Claessen *et al*., 2002). Some conceptual literature (e.g. Admati, Pfleiderer and Zechner, 1994) that investigates the effectiveness of monitoring by large shareholders argues that as large shareholders reap more of the benefits, monitoring produces and therefore, a larger shareholding should be synonymous with a larger commitment to monitor. However, there is a trade-off between the benefits of monitoring arising from concentrated ownership and the benefits of risk-sharing which arises from dispersed ownership. Shareholders with large stake holdings are expected to be more involved in monitoring since they have more to

gain or lose from firm performance (Shleifer and Vishny, 1997). These arguments therefore suggest that blockholding is associated with better performance.

In contrast, it has also been argued that large shareholding has little to no significant impact on firm performance. For instance, a large shareholder may seek to maximize his own wealth at the detriment of other shareholders (Shleifer and Vishny, 1997). A number of empirical studies also provide evidence that large stock ownership does not have a significant impact on performance. For example, McConnell and Servaes (1990) find no significant relation between firm performance and measures of block ownership. Agrawal and Knoeber (1996) do not find any evidence that blockholders play an important role in better firm performance. Lasfer (2002) finds a significantly negative association between blockholding and firm performance on a sample of UK firms. Davies *et al*. (2005) find a strong negative relationship between firm value and blockholding in UK firms.

As mentioned in section 4.5.1, there is an argument in line with agency theory that blockholders have the incentive to collect information and monitor managers (Shleifer & Vishny, 1997); and given the fact that they possess enough voting power, blockholders could force management to act in the best interests of shareholders (La Porta *et al*., 1999). Despite several counter-arguments, the enormous support for large ownership is suggestive of a positive relationship between blockholder ownership and firm performance. The study therefore proposes the hypothesis as follows:

H7: There is a positive association between large equity share ownership by non-institutional investors and the performance of Nigerian listed firms.

4.7. Gender and Ethnic Minority Diversity

The general view in corporate governance literature is that agency conflicts in the corporation arise due to a separation of ownership and control (Bele and Means, 1932). The problem becomes less when the interests of the managers are aligned with those of the shareholders (Jensen and Meckling, 1976). One major role of the board is to help align the interests of the mangers with those of the shareholders. The structure of the board of directors by way of its composition helps in facilitating the accomplishment of this task. Besides the board independence, discussions on board composition are increasingly focused on the concept of board diversity. Although there is no agreed definition of what board diversity covers, board diversity conceptually relates to various board members' attributes and how these impact on board effectiveness. Van der Walt and Ingley (2003) provide an insight into what it entails when they argue, "the concept of diversity relates to board composition and the varied combination of attributes, characteristics and expertise contributed by individual board members in relation to board process and decision making" (p.219). The main issue here is whether board diversity really facilitates boards with an enhanced competence profile required for stimulating performance (Rose, 2007).

The continuing interest in the diversity of the corporate board has formed a global trend towards achieving better corporate governance. A shift towards the inclusion of women and ethnic minorities in corporate boards is an important trend reported in the US (Hillman, Cannella and Harris, 2002). Reforms in many parts of the world also stress the importance of board diversity. For example, the Higgs Report commissioned by the British Department of Trade and Industry in the UK points out that diversity enhances board effectiveness and recommends that more women be included on boards (Fereira and Adams, 2009).

Rose (2007) reports significant interest in Scandinavia in increasing the proportion of female representation on boards. In Norway since 2006, all listed firms must abide by a 40 per

cent quota for female directors or face delisting, and several years ago, Spain passed a law requiring a quota for female directors on boards (Fereira and Adams, 2009). As women, ethnic minorities and people of different nationalities (foreigners) continue to become a larger portion of the national workforce in the economy, corporations will begin to experience significant changes in the pools of likely candidates for top-ranking positions (Conyon and Mallin, 1997; Burke and Nelson, 2002).

Corporate diversity promotes a better understanding of the market place. The literature suggests that diversity tends to bring about higher creativity, a broader knowledge base, innovation and high quality decision-making both at individual and group level which may become a competitive advantage; all these thus enhance the effectiveness of corporate leadership (Watson *et al.,* 1993; Robinson and Dechant, 1997). A higher degree of board diversity may promote greater sustainable global relationships (Carter *et al*., 2003; Rose, 2007); board diversity ensures that corporate decisions are taken from a broader perspective by taking into consideration the interests of all stakeholders, rather than merely focusing on a maximization of the shareholders' value (Rose, 2007).

On the other hand, some research suggests that diversity can potentially be disadvantageous in terms of group performance. The argument is that a heterogeneous group for example may tend to take time to reach an agreement on certain issues (Hambrick *et al*. 1996). Aside from the fact that a higher degree of board diversity provides room for considering issues from wider perspectives which may be time-consuming and thus hamper effective problem-solving, it may also result in more haggling and consequently the board might end up fragmented (Rose, 2007).

Previous studies typically examine two types of diversity: observable diversity such as gender, age, race and ethnicity; or non-observable (cognitive) diversity such as knowledge,

education, values, perception, affection and personality characteristics (Petersen, 2000; Watson *et al.,* 1998; Kilduff *et al.,* 2000). This study focuses on observable diversity, examining the representation of women and those of Niger-Delta ethnic minorities on Nigerian corporate boards. The study considers demographic diversity because an awareness to widen the resource base that is available to firms through corporate boards is yet to gain ground among Nigerian corporations.

Despite arguments by many corporate managers and advocates of good corporate governance that a positive link exists between board diversity and firm performance, there remains the need to examine the connection between the diversity of the board and the success of the firm. As Brancato and Patterson (1999) argue, it is necessary to have a look at good governance from a broader perspective, not just because the corporate board includes a wider spectrum of people, but that because diversity of the corporate board amounts to running a good firm. As pointed out in section 4.8.1 (Theory and Hypotheses Development), there should be a good economic argument or justification for diversifying boards, as typically shown by numbers in the financial statements. It is only when this happens that diversity could be said to have made a difference to an average shareholder (Brancato and Patterson, 1999)

4.7.1. Gender diversity and Firm Performance

Gender is perhaps the most debated aspect of diversity both in terms of the role women play in economic activities generally, as well as their role in boards. Gender diversity relates to the debate over the equal treatment of men and women. Women generally are relegated to the background in social, educational and political affairs, particularly in some societies such as found in Africa. Women have traditionally been poorly represented in the Nigerian workforce, which is a reflection of the deeply rooted societal attitude towards them. Attracting more women to serve on company boards requires that they have the educational opportunities and skills necessary for competing with their male counterparts.

Many arguments have been put forward in support of increased gender diversity and its positive impact on firm value. First, it can be argued ethically that it would be unfair to exclude women from corporate boards on the ground of gender. On the other hand, for economic reasons, one may argue that a firm that fails to select the most competent candidates for the board of directors could be creating an issue for itself; greater board diversity enhances a firm's competitive advantages compared to firms with less diversity (Brammer *et al.*, 2007; Robinson and Dechant, 1997). It has also been argued that diversity enhances creativity and innovation. The contention is that these characteristics are not randomly distributed in the population; rather they tend to vary systematically with demographic variables such as gender (Campbell and Minguez-Vara, 2008). Smith *et al.* (2006) argue that a more gender diverse board may also improve a firm's competitive advantages as it improves the image of the firm, and this may have a positive impact on customers' behaviour and invariably on performance. Carter *et al*. (2003) make a link between board diversity and firm value in the context of agency theory. They contend that greater diversity may increase the independence of the board because women are more inclined to ask questions that would not be ordinarily asked by male directors (Carter *et al.* 2003). It has similarly been argued that diversity can enhance a board's independence of thought so that the board can better perform its monitoring function (Adams and Ferreira, 2009). A more recent study by Ararat, Aksu and Cetin (2015) investigates the indirect impact of a board's demographic diversity on firm performance, using data from Turkey. The authors document a positive and non-linear relationship between demographic diversity and performance.

In contrast to the above discussions, arguments have also been made that greater gender diversity may result in low firm performance. For instance, it has been remarked that members of the homogenous group are more cooperative and experience fewer emotional conflicts (Williams and O'Reilly (1998). However, gender diversity within boards may generate more opinion, critical questioning and thus more conflict, which may make decision-making more time-consuming and

less effective (Lau and Murnighan, 1998). It has also been observed that women are more risk-averse than men (Jianakoplos and Bernasek, 1998). Another study also suggests that women increase the costs of the firm due to higher turnover and absenteeism (Cox and Blake, 1991).

All the arguments stated above show both negative and positive associations between the presence of women on the board and firm value, therefore suggesting that the impact of gender diversity cannot be determined a priori. Most of the empirical evidence provided on gender diversity is similarly inconclusive. Take for example Carter *et al.* (2003) who examine the relationship between board diversity and firm value for 1000 US firms. They find significant positive relationships between the proportion of women on boards and Tobin's Q. Erhardt *et al.* (2003) examine the relationship between demographical diversity on boards of directors and performance. They show a positive association between the percentage of women on boards and accounting measures of performance. Labelle and Sinclair-Desgagne (2008) find a positive relation between gender diversity and financial performance with respect to firms operating in riskier environments. Adams, Gupta and Leeth (2009) find no difference in firms' financial performance around the appointment of a woman or a man as CEO in the USA. Adams and Ferreira (2009) provide evidence that female directors have a significant impact on measures of board effectiveness. Haslam *et al*. (2010) also report that there is no association between female board representatives and accounting-based performance measures, but a negative correlation with stock-based performance measures. Ben-Amar *et al.* (2013) investigate the joint effect of corporate ownership and board of directors' diversity configurations on the success of strategic merger and acquisition (M&A) decisions. Using panel data of 289 M&A decisions in Canada over 8 years, they found that demographic diversity has a clear and non-linear effect on M&A performance, despite statutory diversity being of limited influence.

In summary, given the above evidence, the relationship between gender diversity of the board and firm performance is mixed and inconclusive. The conflict in empirical evidence according to Campbell and Minguez-Vera (2008) may be explained in a number of ways. First, these studies are conducted using data of different countries and they relate to different time periods. The effects of board gender diversity may be dependent on timing and on the legal and institutional contexts of each country. Conflicting results may also be due to different methodologies adopted by the researchers in their estimations. For example, there might be cases of omission of the relevant variables such as size and leverage that ordinarily affect firm performance. There might be unobserved factors. Some studies use cross-sectional data as against a more reliable panel data.

4.7.2. Ethnic Minority Diversity and Firm Performance

This study considers ethnic minorities in the discussion of board diversity because ethnicity is an issue in Nigeria. There are three major ethnic groups in Nigeria (the Hausa/Fulanis, Yorubas and Igbos). Besides these, there are over 250 minority ethnic groups. The Niger-Delta community is the only region in Nigeria endowed with an abundance of crude oil, but appears marginalised in the economic and political affairs in the country. There are many socio-political crises in the region that often cause great disruption to economic activities (oil exploration) in the region. Nigeria derives about 99 per cent of its oil revenue from oil exploration carried out in this region. The majority of people from this region are not well-educated but the few that are educated are highly connected to pressure groups in their communities; therefore, their representation on corporate boards in line with the spirit of resource dependency theory may provide essential resources to the firm or secure resources for the firm through linkages to the external environment (Pfeffer & Salancik, 1978; Daily & Dalton, 1994) especially those operating in the oil and gas sectors.

Women and ethnic minorities have long been considered 'outsiders' in the business world (Hillman *et al.,* 2002). For them to overcome this outsider status, they may need to demonstrate expertise, accomplishments and knowledge. The opportunity for attaining these is usually provided by higher educational degree attainment, among other factors. So, through education women and ethnic minorities may establish creditability as potential directors and be able to demonstrate valuable skills and connections as a result of their education (Hillman *et al*., 2002). In their study Hillman *et al.* (2002) argue that education is the main mechanism for securing recognition of individual achievements and expertise. Through education, women and ethnic minorities can publicly demonstrate expertise and thereby stem the effects of long-held stereotypes and bias that may diminish their appeal to committees saddled with directors' selection responsibilities.

There are few studies available solely on ethnic minorities diversity, with studies on firm performance rather tending to examine the relation between gender and ethnic minorities. Many of these studies document mixed results. Carter *et al.* (2003) investigate board diversity (defined here as the proportion of women, African Americans, Asians and Hispanics on the board of directors) and firm value using panel data on Fortune 1,000 US firms. They find positive relationships between the presence of women or minorities on the board and firm value. Erhardt *et al.* (2003) examine the relation between board diversity (women and minorities on the board) and firm performance, using cross-sectional data on 127 large US firms, and also found that board diversity is positively associated with performance. Carter *et al.* (2010) investigate the relationship between the number of female directors and the number of ethnic minority directors on the board and firm financial performance on a sample of major US firms (S&P 500 index) over a 5-year period. They, however, do not find a significant relationship between the gender or ethnic diversity of the board and the firm's financial performance. These studies also provide mixed and inconclusive results; the explanation for the inconsistent results is as discussed above.

4.8. Hypotheses Development

4.8.1. Hypotheses Development on Gender and Ethnic Diversity-Performance Relationship

The composition of the corporate board is one of the important governance mechanisms, as it aims to identify the structures that align the interests of the management with those of the shareholders. The board of directors is an important internal governing mechanism for controlling and monitoring managerial opportunistic behaviour. A review of relevant literature in sections 4.7 to 4.7.2 contains discussions on board diversity, specifically gender and ethnic minorities diversity and their impact on firm performance. The concept of board diversity relates to board composition, with respect to a combination of attributes, characteristics and expertise of the board members towards the board processes and decision-making (Van der Walt and Ingley, 2003). Diversity increases creativity and innovation and thus enhances the effectiveness of corporate leadership. While homogeneity at the top company level may result in a narrow perspective, a diverse top management takes a broader view of issues and is more likely to make better decisions (Carter *et al.*, 2003).

One of the prominent aspects of board diversity and which is of interest in this study is gender. The debate about the equal treatment of men and women in society is ongoing (Rose, 2007). In Nigeria, due to culture and traditions, women rarely receive equal treatment to men. The cultural and traditional beliefs in this part of the globe are that men perform better than women in all aspects of human endeavour. This behaviour reinforces discrimination against females in many aspects of life, including but not limited to gaining access to formal education, although this trend is changing due to changes in the value system of the Nigerian people and due to globalization. Women have also historically been generally discouraged from accessing formal education and gaining office employment, instead being confined to largely domestic roles. This fact is buttressed by Allanana (2013), who in his study remarks that “in Nigeria, it is observed that the womanhood

is reduced to a mere infidel and a second-class citizen, hence, there is the commonality of general belief system that the best place for women is the 'kitchen'. This trend has brought about tremendous misrepresentation of women right at the level of family down to the circular society. The Nigerian society is patriarchal in nature which is a major feature of a traditional society. It is a structure of a set of social relations with material base which enables men to dominate women" (Allanana, 2013, p.115.) However, in recent years, the number of educated women and those in formal employment has risen. Although the proportion of females in top management positions and on the boards of companies in Nigeria is still far lower than those of their male counterparts, female representation on the corporate board has increased.

Aside from gender diversity, the study also examines the influence of ethnic minorities on the boards of Nigeria firms on firm performance. Nigeria's population comprises three major ethnic groups: the Hausas/ Fulanis in the northern part comprise about 40 per cent, the Yorubas in the west comprise about 21 per cent and the Igbos in the east 18 per cent. The ethnic minorities of interest in this study are the Niger-Deltas because of the significance of the Niger-Delta region to the nation. The mainstay of the Nigerian economy is oil. The Nigerian economy is driven mainly by oil exploration in the Niger-Delta region, although there are other economic activities that contribute to the federal government revenue. The region, is often in crises involving clashes between the oil exploration companies/Federal Government of Nigeria on one side and the host communities on the other side. Because of huge environmental degradation over the years, caused by oil exploration in the Niger-Delta region, there is incessant unrest in this region, and consequently resulting to disruption in oil production. The economic consequence of this includes shortages in the nation-wide fuel supplies and thus fuel crises across the nation. For more than two decades, Nigeria has always had epileptic and in most times acute shortage supply of electricity, this problem, has forced most manufacturing companies in Nigeria to resort to the use of diesel oil to power their production machineries. The problem of shortages of electricity supplies coupled

with incessant fuel crises consequently has forced a lot of companies to close-down, due to high operating costs of energy. The Federal Government of Nigeria often loses huge revenue because of oil exploration disruption in the Niger-Delta region; many oil servicing companies and oil marketing companies are also not operating profitably; the economic activities in the entire country is often being affected in one form or the other by the crisis. The study chooses the Niger-Delta ethnic minorities, because it is expected that their representation on the Nigerian corporate boards will have positive impact on the operations of Nigerian companies directly or indirectly, given their potentials to provide linkages to the host communities and mediate between the oil exploration companies and the host communities in the region.

The main argument for diversity is that it enhances shareholders' value (Dvorak, 2008). For instance, competent female and ethnic minority directors should not be considered as substitutes for traditional corporate directors with identical abilities and talents. Appointing women and ethnic minorities should not be based on the grounds that, they deserve the opportunities to serve on the board, but the rationale should be that their presence on the board could make the business more profitable. As discussed in sections 4.7 to 4.7.1, there should be a business case for gender or ethnic diversity. Gender or ethnic diversity could be said to influence performance only when such diversity results in better governance. In other words, it is only when the women and ethnic minorities on the board have certain unique characteristics that they create additional value. The question is to what extent the female and ethnic minorities directors on corporate boards in Nigeria do possess such unique attributes. This can only be determined empirically.

According to resource dependency theory, the 'type' of diversity is significant (see section 3.2.3). Because, women and ethnic minorities compare to other director types have different external connections to the environment, it is predicted that they will not have the same

effect on board functions and eventually on firm performance (Carter *et al*., 2010). Furthermore, the empirical evidence provided by Hillman *et al.* (2002) and Peterson and Philpot (2007) supports the idea that female and ethnic minority directors may have different functions on the board.

The board of directors is generally believed to perform at least three major roles in the firm's corporate governance. First, the directors on the board perform the agency role. According to agency theory, due to a separation of ownership from control, the manager and shareholder's interests may diverge; the board is a mechanism for aligning those interests through monitoring and controlling of the managers (Jensen and Meckling, 1976). As argued in section 4.4.1 of this study, outside directors are considered better monitors; however, with reference to section (3.2.3) which covers the theoretical perspective on board diversity-performance relations, it has also been argued that a more diverse board may be a better monitor of managers because board diversity increases board independence (Carter, Simkins and Simpson, 2003). Second, the board performs the resource dependence role. In their resource dependence roles, directors serve to connect the firm to the external resource dependencies (Hillman, Cannella and Paetzold, 2000). As discussed in the theoretical perspective section 3.2.3, boards provide corporations with linkages to other external organizations in order to address external environmental dependencies (Pfeffer and Salancik (1978). Hillman, Cannella, and Paetzold (2000) expand Pfeffer and Salancik's (1978) resource benefits derivable by the corporation from these external sources into a taxonomy of director types (such as insiders, business experts, support specialists, and community influencers) that provide various resources to the firm. Hillman, Cannella, and Paetzold's (2000) expansion of resource dependence theory suggests that different types of directors will provide different resource benefits to the corporation. The argument therefore is that a more diverse board will provide more valuable resources, which should result in better firm performance (Carter *et al.*, 2010). Third, the directors' education reflects human capital of the investments made in specialized expertise (Judge *et al*., 1995).

Resource dependency theory does not specifically predict a link between board diversity and firm financial performance but it is highly suggestive of a positive relationship (see section 3.2.3). Agency theory offers the possibility that diverse directors may be better monitors of the management as supported by evidence provided by Adams and Ferreira (2009). However, agency theory, in a similar manner to resource dependency and human capital theory, only suggests a link between board diversity and firm performance (Carter, D'Souza, Simkins and Simpson, 2010). In summary, despite the fact that there is no clear-cut prediction by any of the available theories about the relationship between board diversity and firm performance, an interdisciplinary set of theories as discussed in sections 3.1 to 3.2.3.1 provide an indication that a link between board diversity and firm performance is a high possibility (Carter, D'Souza, Simkins and Simpson, 2010). Based on the foregoing discussions, the study proposes hypotheses as follows:

H8: The representation of Niger-Delta ethnic minority origin directors on the boards of Nigerian listed firms enhances firm performance

H9: The presence of female directors on the boards of Nigerian listed firms enhances firm performance

4.9. Summary

This study notes that, investigating the impact of governance mechanisms on firms' financial performance have produced mixed and conflicting findings. Some researchers have provided explanations for such conflicting findings (i.e. in terms of positive, negative and insignificant relationships). This according to them, might have been due to differences in the methodology employed (see Demsetz. & Villalonga, 2001; etc.) or due to differences in the theories underpinning the research (Mura, 2007) or even due to endogeneity nature of the board structure (Hermalin and Weisbach, 1991; etc). Furthermore, mixed results between those studies

based on developed and emerging markets may be due to substitution effect between internal and external governance mechanisms, as the monitoring by outside directors for instance remain vital governance mechanism especially in the emerging and developing economies where legal institutions offer weaker investors' protection (Liu et al. 2015; Ferreira and Matos, 2008; McCahery et al., 2010; Klapper and Love, 2004)

5.0. CHAPTER FIVE: RESEARCH METHODOLOGY

5.1. Introduction

This chapter discusses the research methodology used in this study. It seeks to provide comprehensive description and explanations of the data and research methods used in the study. The importance of this is that as every scientific work should be capable of being replicated and this is achievable only if the researcher provides a clearly laid down procedures of how the research has been carried out (Hussey and Hussey, 1997). The study makes use of the quantitative research method in its data collection, analysis and interpretation of the findings. Bryman & Bell (2007) describe quantitative research as a "research strategy that emphasizes quantification in the collection and analysis of data and that entails a deductive approach to the relationship between theory and research, in which the accent is placed on the testing of theories; has incorporated the practices and norms of the natural scientific model and of positivism in particular; and embodies a view of social reality as an external, objective reality" (Bryman & Bell (2007). In a similar manner, Easterby-Smith *et al.* (2008) describe the quantitative method as that which involves the collection of data either in the form of or can be expressed as numbers. These definitions provide the essential features of a quantitative research method. The chapter is organized as follows: Section 5.1 introduces the chapter. Section 5.2 describes the sample selection procedure and criteria for selecting the sample. Section 5.3 describes the type and sources of data used in the study. Section 5.4 describes the panel data analysis framework. Section 5.5 discusses the model specification. Section 5.6 discloses the methods of estimations and section 5.7 contains the chapter summary.

5.2. Sample Selection

The firms used as sample in examining the relationship between the internal corporate governance and firm financial performance in this study were drawn from those companies that

were listed on the Nigerian Stock Exchange as at 31 December 2015. As at this date, a total of 205 companies were officially listed on the NSE. The official list of these companies is contained in the Daily Stock Market Report obtained directly from the NSE head office in Lagos, Nigeria. This was cross checked with the list available on the NSE's official website, which is accessable at: www.nse.com.ng/issuers/listed-securities/listed-companies@31/12/15. The companies listed on the NSE is officially classified by the exchange into twelve major industries which include: consumer goods, health care, industrial goods, oil and gas, services, agriculture, construction/real estate, conglomerate, Information Technology (ICT), utilities, natural resources and financial services. Table 5.1 presents a summary of the sample selection procedure. In the table, Panel A discloses the composition by industrial sector of all companies that were listed on the on the NSE as at 31 December 2015

Panel A indicates that the market is dominated by the financials, consumer goods, industrial goods and services all which in total account for about 70 per cent of the entire Nigerian stock market. The financials industry is made-up of 61 companies and utilities industry consists of 2 companies all together which account for about 38 per cent of the entire stock market were excluded from being sampled by the reasons stated as follows. First, the financials and utilities industries are heavily regulated, have different policies that guide them which may impact differently on their governance practices and financial performance compared to other industries. The banks and other financial institutions in Nigeria for example, have a different corporate governance code that guides their operations. Second, financial firms have unique capital structure (e.g. usually they are highly geared) which may impact on their financial performance differently (Lim et al., 2007; Ntim, 2009). It has been argued that, exclusion of financial and utilities companies may help facilitate comparison of the study with others (Haniffa and Hudaib, 2006; Mangena and Chamisa, 2008). Furthermore, excluding these firms from sampling is consistent

with prior corporate governance literature (e.g. Yermack, 1996; Satia-Atmaja, 2009; Liu et al., 2015).

Panels B presents the composition by industrial sector of the remaining 10 industries that were available to be sampled. Those 10 industries comprise of 142 firms and just twelve companies (i.e., about 9 per cent) had no data available for sampling. This left about 130 firms (92 per cent) being available for the final sampling. Two criteria were used for the sample's selection as follows: (1) For a firm to be included in the sample of firms to be selected, it must have issued a full year annual reports that have been certified by the appointed statutory auditors (SEC Code, 2011; CAMA. 2004) and filed with the NSE and CAC. (2) Its corresponding stock market and financial accounting information must be available in Data Stream and/or Compustart. Panel C of Table 5.1 presents the composition by industry of the firms that were eventually sampled. The finally sampled firms comprise of both the firms with full and incomplete data. It indicates that, only 20 companies were with full data (18 per cent) while 110 firms (82 per cent) were with some years missing. This results into this study having unbalanced panel data for its analysis and with 130 sampled firms.

The size of a sample has a direct impact on the appropriateness and statistical power of multiple regressions (Hair *et al*., 1998). Ideally, a study should make use of large samples but avoid using samples that are too large in order not to encounter the risk of what is called 'over-fitting' (Hair *et al.,* 1998). This research considers the impact of the sample size on both the statistical power and generalizability of the result. The appropriateness of the ratio of observations to each independent variable should always be taken into consideration. Although the minimum is 5 to 1 and the desirable is between 15 to 20 observations to 1 independent variable (Hair *et al.*, 1998), in practice the ratio varies considerably with the nature of investigation.

5.3. Data and Sources

In this study, two main categories of data are used for investigating the relationship between the internal corporate governance structure and firm performance of the Nigerian listed firms. The first category of data consists of the internal corporate governance data. The data were manually extracted from the 'hand to collect' annual reports of the sampled companies listed on the Nigerian Stock Exchange. The hard copies of these annual reports were complemented with those downloaded electronically from the companies' web sites or the African Financials web site (http://www.africanfinancials.com) and the PI Navigator database.

The second category of data consists of financial data relating to the sampled companies' stock market valuation. They were obtained from five major different sources such as the Nigerian Stock Market Reports, Company's Annual Reports, Cowry Assets and Cash Craft web sites, and the Data Stream database. Besides the stock market valuation data, some other financial accounting data were also collected from various databases such as Compustat, Data Stream and The Nigerian Stock Exchange database.

Table 5.1 Summary of the Sample Selection Procedure

Panel A:	*Industrial Composition of all firms listed on the NSE as at 31/12/2015*		*No. in each industry*		*Percentage (%) of population*
Financials			61		29.8
Consumer Goods			39		19.0
Agriculture			5		2.4
Construction/Real Estate			10		4.9
Healthcare			11		5.4
Industrial Goods			21		10.2
Information Technology & Communication			9		4.4
Natural Resources			5		2.4
Oil & Gas			13		6.3
Services			23		11.2
Utilities			2		1.1
Conglomerate			6		2.9
Total population			205		100
Less:	Financials	61			
	Utilities	2	63	30.7	
Total sampled firms			*142*		69.3

Panel B:	*Industrial composition of Firms available to be sampled*		*No. in each industry*		*Percentage (%) of sample*
Consumer Goods			39		27.4
Agriculture			5		3.5
Construction/Real Estate			10		7.0
Healthcare			11		7.7
Industrial Goods			21		14.8
Information Technology & Communication			9		6.3
Natural Resources			5		3.5
Oil & Gas			13		9.2
Services			23		16.3
Conglomerate			6		4.3
Total Firms available to be sampled			*142*		100
Less:	Firms with no year's data available		12		8.5
Total sampled firms			*130*		91.5

Panel C:	*Industrial composition of Sampled Firms*		*No. in each industry*		*Percentage (%) of sample*
Consumer Goods			33		25.4
Agriculture			5		3.8
Construction/Real Estate			9		6.9
Healthcare			10		7.7
Industrial Goods			19		14.6
Information Technology & Communication			9		6.9
Natural Resources			5		3.8
Oil & Gas			13		10.00
Services			21		16.3
Conglomerate			6		4.6
Total sampled firms			130		100.00
Sampled firms with full data		20		18	
Sampled firms with some years' data missing		110		82	
Total sampled firms			*130*		100.00

Table 5.1: Sample Selection Procedure

5.4. Panel Data Analysis Framework

A variety of data is available for empirical analysis. These include time-series, cross-sectional and panel data. This study makes use of a panel data analysis framework to investigate the relationship between corporate governance mechanisms and firm performance. Panel data (also referred to as longitudinal or cross-sectional time-series data) is a dataset in which the behaviour of entities (firms in this study) is observed across time (Torres-Reyna, 2007).

5.4.1 Benefits of Panel Data

Panel data allows the researcher to control for variables that cannot be observed or measured, such as differences in business practices across firms, cultural factors or variables that change over time but not across entities. Besides accounting for the individuals' or entities'

heterogeneity, panel data combines time and a series of cross section observations; therefore, panel data gives more informative data, more variability, less collinearity among variables, more freedom and more efficiency, and these among others are the reasons why this study makes use of panel data. Nevertheless, panel data has its own disadvantages which include data collection issues relating to sampling design, coverage, etc.

5.5. Model Specification

5.5.1. Board Independence – Performance Relationship Model

The study uses regression analysis to examine the impact of board independence on firm performance. In its estimation procedure, the measure of firm performance is regressed against the measures of board independence, together with other relevant explanatory variables as stated in the model below:

$$Firm\ performance = \alpha_0 + \alpha_1 board\_indep + \sum \alpha x + \varepsilon \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \text{eq. (1)}$$

The model in the above is used for testing hypothesis 1a. In the model, the dependent variable *Firm performance* is the approximation of Tobin's Q (or Return on Assets) and the variable *B_ind*, is the main explanatory variable of interest for the investigation. It is measured as the proportion of the Independent Non-Executive Directors on the board. In the model, α_0 is the intercept coefficient, α_1 the slope coefficient, ε the error term, and *x* the vector of other explanatory variables. In estimating this model, besides the main explanatory variable the study also controls for several factors that could possibly have influence on the firm performance variable either directly or indirectly. These factors may be specific to the firm itself, the industry it belongs to or the market in which it operates. Omitting the effects of such factors may lead to spurious findings. Consistent with prior research, the study controls for the effects by including other variables such as leverage, firm size, board size, profitability, investment, CEO duality, growth opportunity,

foreign CEOs, the industry effect and year effect. Each of these variables is discussed in detail below.

Dependent variables

The Tobin's Q or ROA as a measure of financial performance is common with governance investigations, for the reason that each of these measures covers different aspects of firm performance. For example, the accounting measures present a view on a firm's past performance, whilst Tobin's Q focuses on expectations of future performance (Demsetz and Villaloga, 2001). Tobin's Q reflects the market's expectations of the future earnings and therefore is a good proxy for a firm's competitive advantage (Montgomery and Wernerfelt, 1988). Tobin's Q accounts for risk and unlike accounting measures is not subject to reporting distortions that usually arise from changes in the tax laws and accounting conventions (Lindenberg and Ross, 1981). Tobin's Q is widely used by researchers for explaining a variety of economic phenomena including managerial equity ownership (Morck, Shleifer and Vishny, 1988), corporate diversification (Hyland and Diltz, 2002), board composition (Hermalin and Weibatch, 2001; Bhagat and Black, 2000), board of directors' diversity (Carter *et al.,* 2003; Campbell and Minguez~Vera, 2008), among others. Tobin's Q actual definition is the market value of the firm divided by the replacement value of the firm's assets. However, as replacement cost of assets information is not available in Nigeria, this study defines Tobin's Q as the market value of equity plus the book value of all liabilities and preference shares scaled by book value of total assets[16]. This measure is an indication of the wealth position of the major providers of funds (i.e. the shareholders and creditors) to the firm (Carter *et al*., 2010). As expected by the market, a Tobin's Q greater than one means effective utilization of the available firm's resources (i.e. the market value of the providers of funds' investments is greater than the amortized historical cost of the

[16] This proxy highly mirrors the actual definition of Tobin's Q as it has been widely used in the US and Australian studies (e.g. Demsetz and Villalonga, 2001; Setia-Atmaja, 2009)

assets). However, a Tobin's Q less than one is associated with poor utilization of available firm's resources, which is not desirable for the market. Tobin's Q as a stock market-based measure is susceptible to investors' anticipation (Bhagat and Bolton, 2008).

ROA reflects the ability of the firm to produce accounting-based revenues in the excess of actual expenses from a given portfolio of assets over a given period of time, usually twelve months (Carter *et al*., 2010). Unlike Tobin's Q that measures the firm's value or wealth and reflects the market expectations of future earnings, the ROA measures the firm's income over a particular period and provides views about the firm's past performance. ROA is calculated as net income (profit before tax) divided by the book value of total assets[17] .

Independent variables

Board independence – The study tests for whether the presence of independent outside directors on the board influences firm performance. The argument is made in section 4.3 that independent outside directors are better monitors relative to inside directors or affiliated non-executive directors. Not only that, they help check managerial opportunisms, and they also help protect the interests of minority shareholders against the powers of the controlling shareholders seeking to extract rent for their private benefits (Anderson and Reeb, 2004). Some studies provide evidence of a positive influence of an independent board on firm value (e.g. Satia-Atmaja, 2009; Baysinger and Butler, 1985), while others provide evidence of a negative impact and of no impact by other studies (e.g. Agrawal and Knoeber, 1996). The study includes in the performance equation the proportion of independent outside directors that are present on the board. Most corporate governance practices around the world emphasise the need for more directors who are independent of the management on the firm's board[18]. In the study, independent directors are considered the

[17] Some studies however, use profit before tax in their calculation of ROA (e.g. Munisi and Randoy, 2013)

[18] The Nigerian Security and Exchange Commission code on corporate governance requires every public company to have board membership of not less than five members, with non-executive directors being the majority and at least one of whom should be an independent director (SEC code, 2011).

"individuals whose business relationship with the firm is only their directorship" (Anderson & Reeb, 2004. p. 219). In the study, board independence (*board_ind*) is measured as the proportion of independent non-executive directors[19] on the board. The measure of board independence is consistent with prior studies (e.g. Satia-Atmaja, 2009; Chan & Li, 2008; Cotter and Silvester, 2003). The independent directors are identifiable through the Report of the Directors in the firm's annual report. Variable board independence has been measured differently by different studies. Some of the prior studies (e.g. Pearce & Zahra 1992; Agrawal & Knoeber, 1996; Klein, 1998; Wintoki *et al.*, 2012) measure board independence as the proportion of non-executive directors on the board, while others (e.g. Satia-Atmaja, 2009; Liu *et al.*, 2015) measure outside directors as the proportion of independent non-executive directors on the board. However, Bhagat and Black (2002) make a distinction between directors, classifying them into three categories: independent directors, affiliate directors and insider directors[20]. In effect, Bhagat and Black (2001) classify outside directors into two: those non-executive directors who are fully independent (i.e. independent directors); and those that appear substantially independent (i.e. affiliated directors). In their classification, affiliated directors are people who are likely to have a business relationship with the company, such as lawyers, investment bankers, recent past officers or relatives of the current officers of the company, whereas the independent director category does not have such a relationship. In this study, following Satia-Atmaja (2009) and Liu et *al*. (2015), the independent

[19] This study defines independent director in line with the provision of the Nigerian Security and Exchange Commission code on corporate governance which defines it in the following ways. A non-executive director either without any shareholding or with (no substantial shareholding) shareholding not exceeding 0.1per cent of the firm's paid-up equity share capital (SEC code, 2011). A non-executive director who is not a representative of a shareholder has the ability to control or significantly influence management. A non-executive director who has not been employed by the company or the group of which it currently forms part or has served in any executive capacity in the company or group for the three preceding financial years. Is not a member of immediate family of an individual who is or has been in any of the past three financial years, employed by the company or the group in an executive capacity. Is not a professional adviser to the company or the group other than in a capacity of a director. Is not a significant supplier to or customer of the company or group. Has no contractual relationship with the company or group and free from any business or relationship, which could materially interfere with his/her capacity to act in an independent manner. Is not a partner or an executive of the company's statutory audit firm or consulting firm that have a material association with the company. An independent director should be free of any relationship with the company or its management that may impair his/her ability to make independent judgement.

[20] This classification is very similar to that of Baysinger and Butler (1985) who classify directors into three categories: the outside director, grey director and insider director

or outside directors refers to the category of non-executive directors who do not have any relationships whatsoever with the company either currently or previously, except their current directorship. This category is classified in this study as independent non-executive directors. The Nigerian corporate governance code requires every public company in Nigeria to appoint at least one independent director on its board (SEC code, 2011). The code specifies the criteria that such directors must meet as listed in footnote 20. In this study, board independence (i.e. *board_indep*) is measured as the proportion of independent non-executive directors on the corporate board. Several control variables are also included in the regression model as discussed below:

Board size – Yermack (1996) finds a negative relationship between board size and firm value (Tobin's Q), however evidence from Pearce and Zahra (1992), Dalton, Daily, Ellstrand and Johnson (1998) and Jackling and Johl (2009) support a positive relationship between firm size and firm value. The argument made for positive association is that a larger board comes with greater knowledge and therefore provides better information for decision making which should eventually improve firm performance (Jackling and Johl, 2009).

Leverage – Creditors tend to closely monitor highly leveraged firms and may put pressure on them to adopt sound corporate governance practices (Munisi & Randoy, 2013). Creditors such as banks can sanction or veto investment projects, make demands on the composition of the board and may write debt contracts that may include some stringent conditions relating to what the firm should or should not do (Thomsen & Conyon, 2012). Debt may also force managers to commit operating cashflow towards fixed charges, which are subject to monitoring by external parties, and because of this, it has been argued that debt reduces extraction of private benefits of control and thus helps in alleviating agency problems (Easterbrook, 1984; Jensen, 1986). The leverage included in all the models of this study is measured as the book value of debt divided by assets, which is consistent with prior studies (e.g. Sati-Atmaja, 2009)

Firm size – The study includes firm size in the analysis to control for the impacts of size on corporate governance and therefore performance. As discussed in the above section, larger firms with large-scale operations tend to put in place a sound system of internal control and other forms of corporate governance practices than lower size firms. Firm size is measured by the logarithm of total assets; this is consistent with the literature (e.g. Munisi & Randoy, 2013; Carter *et al*., 2010).

Profitability – Profitability has a significant influence on market valuation, as an investor would be willing to own a company that is profitable compared to investing in a non-profitable company; this study therefore controls for profitability in its regression model. The performance of a firm (profitability or otherwise) influences the composition of its board (Satia-Atmaja, 2009). Likewise, a firm's prior year's performance may influence the decision on its board composition (Hermalin and Weisbach, 2003). This study therefore uses profitability as an explanatory variable.

CEO-duality – The conventional wisdom posits that CEOs with dual roles exercise more power over the board (Klien, 1998). Prior studies (e.g. Harmalin and Weisbach, 1998) also suggest that board independence reduces as the CEO's influences rises. The Nigerian corporate governance code requires a separation of the roles of the CEO and the board's chair; therefore, a few of those firms still have the roles of the CEO and board chair performed by one person. However, the CEO influence could still be high in the context of Nigerian firms, especially where the CEO of a public company is also the chair or a member of a monitoring committee, such as the audit, compensation and nomination committees. The CEO's dual roles of course would be likely to have an adverse impact on the firm's performance. This study therefore measures this variable using binary with a value of one where the CEO is either the chair or a member of any of the monitoring committees, and zero otherwise.

Growth opportunities – A firm's growth potential has an impact on its corporate governance. As Coles *et al.* (2008) note, independent directors are less likely to be effective in monitoring firms with a high growth opportunity. They argue that board or audit committee independence is negatively associated with the firm's growth opportunity. In this study, firm's growth potential is therefore included in the board independence-performance relationship regression.

Dummy Variables – The study includes dummies to control for differences in the industries and years that are included in the sample.

5.5.2. Board Independence - Ownership Concentration Relationship Model

The model for estimating the relationship between board independence and ownership concentration is stated below:

$$B\_ind = \alpha_0 + \alpha_1 Closely\_held + \sum \alpha x + \varepsilon \quad \text{.....eq.(2)}$$

In this study, firms are categorized into those that are closely-held and widely-held. The categorization depends on whether a single shareholder holds at least 20 per cent of the issued equity shares. This ownership threshold is considered sufficient for exercising effective control, following prior ownership studies (e.g. La Porta *et al.*, 1999; Faccio, Lang and Young, 2001; Satia-Atmaja, 2009). The study uses closely-held to proxy for ownership concentration and measures it by a dummy variable that equals 1, if a firm has a blockholder holding at least 20 per cent of the issued shares and zero otherwise. All other variables used in this model remain the same as in section 5.5.1 above.

5.5.3. Moderation Effect of Ownership Concentration Model

The model specification in 5.5.1. tests for a causal relationship between board independence and firm performance. Using multiple regression analysis, the study further examines the moderation effect of ownership concentration on the relationship between board independence and firm performance. In the estimation procedure, an interaction variable is created (i.e. *B_ind * Closely_held*), and then the measure of performance is regressed against the interaction variable and other explanatory variables to see whether the board independence-performance relationship is moderated. The estimation model is given as follows to test hypothesis 1c:

$$Firm\ performance = \alpha_0 + \alpha_1 B\_ind + \alpha_2 Closely\_held + \alpha_3\ (B\_ind * Closely\_held) + \Sigma\alpha\gamma + \varepsilon \quad \text{.....eq. (3)}$$

In the model, the measure of firm performance is the approximation of Tobin's Q (or ROA); while *B_ind*, the main explanatory viable is measured as the proportion of Independent Non-Executive Directors on the board. *Closely_held* denotes Ownership concentration; α_0 is the intercept coefficient, $\alpha_1, \alpha_2, \alpha_3$ slope coefficient respectively, ε the error term while γ is the vector of control variables. In estimating this model, besides the inclusion of the main explanatory variable (i.e. *B_ind*), the study also controls for several factors that could possibly have an influence on the firm performance either directly or indirectly. The control and other explanatory variables used in this model are the same as those in the model specification for testing hypothesis 1a in 5.5.1.

5.5.4. Gender Diversity–Performance Relationship Model

The study examines the impact of gender diversity on firm performance using multiple regression analysis. In the estimation procedure used, the measure of firm performance is regressed

against the measure of gender diversity together with other relevant explanatory variables as expressed in the model below:

$$Firm\ performance = \beta_0 + \beta_1 Women\ (or\ DWomen) + \sum \beta ¥ + \varepsilon \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \text{eq. (4)}$$

The model is used for testing hypotheses 9. In the model, *Firm performance* is the approximation of Tobin's Q (or Return on Assets) and *Women (or DWomen)* is the proxy for gender diversity. *Women,* the main explanatory variable, is measured by the proportion of female directors on the board (or *DWomen*, measured by a binary with value of 1, if at least one female director is on the board, otherwise zero). In the model, β_0 is the intercept coefficient, β_1 the slope coefficient, ε the error term while ¥ is the vector of other explanatory variables included in the model. In estimating this model, apart from the main explanatory variable, the study also controls for several factors that could possibly have an influence on the firm performance variable either directly or indirectly, such as: Leverage, Independent directors, Board meetings frequency, Board size, Firm size, Investment, Profitability, Foreign CEO, Growth opportunity and CEO duality. Some of these are discussed in section 5.5.1

Independent variables

Women & DWomen – The study seeks to find whether there is a link between gender diversity and firm performance. Carter *et al.* (2003) argue that diversity increases board independence as women might ask questions that would not be normally asked by male directors. In their study, Carter *et al.* (2003) find significant positive relationships between the percentage of women on the board and firm value. Another possible argument is also that greater board diversity increases the firm's competitive advantage compared to firms with a less diverse board. In this context, Brammer, Millington & Pavelin (2007) in their study of UK corporate boards find that the highest rates of female directors are associated with the retail, banking, media and utilities sectors. Similarly, Campbell and Minguez-Vera (2008) examine gender diversity in the boardroom and firm

performance using panel data on a sample of Spanish firms and find that the percentage of women on the board has a positive effect on firm value. Following Carter *et al.* (2003) and Campbell and Minguez-Vera (2008), the study measures *Women* as the percentage of female directors on the board and *DWomen* as a binary with a value of 1 when there is at least one female director on the board and zero otherwise. Women (or *DWomen*) is included as the main explanatory variable in the gender-performance relationship estimation.

Board meetings frequency – The study considers meetings as important aspects of the board process. Although Jackling and Johl (2009) find no relationship between board meetings and the firm financial performance, Vafeas (1999) provides evidence of a positive relationship between the frequency of board meetings and firm performance. The view in this study is that meeting attendance by the directors is a pointer to the quality of board process. Therefore, the study defines the frequency of board meetings as the natural logarithm of the number of times the board meeting is held annually by each firm and this variable is included in the performance equation.

Foreign CEO – The use of foreign CEOs is more common with firms in emerging economies such as Nigeria. The business case for this is that foreign CEOs relative to local CEOs have wider and international exposure. In practice, it is common to see that foreign CEOs have worked in conglomerates and multinational companies. A majority of Nigerian firms tend to source CEOs with a preference for people that have international exposure. Sanda, Mikailu and Garba (2005) in their analysis of corporate governance mechanisms and firm performance on a sample of Nigerian firms provide evidence that firms with foreign CEOs perform better than those with indigenous CEOs. Following Sanda, Mikailu and Garba (2005), the study includes the variable in its board diversity-performance equation.

5.5.5. Ethnic Diversity–Performance Relationship Model

In this section, the impact of ethnic diversity on firm performance is examined using the multiple regression analysis. In the estimation procedure, the measure of firm performance is regressed against the measure of ethnic diversity together with other relevant explanatory variables as stated in the model below:

$$Firm\ performance = \mu_0 + \mu_1 Minority\ (or\ DMinority) + \sum \mu \S + \varepsilon \quad \ldots\ldots\ldots\ldots\ldots\ldots \text{ eq. (5)}$$

The study uses the model for testing hypotheses 5 & 6. In the model, *Firm performance* is the approximation of Tobin's Q (or Return on Assets) and *Minority (or DMinority)* is the proxy for ethnic diversity. *Minority*, the main explanatory variable, is measured by the proportion of ethnic minority directors on the board (or *DMinority*, measured by a binary, with value of 1, if at least one ethnic minority director is on the board, otherwise zero). In the model, μ_0 is the intercept coefficient, μ_1 the slope coefficient, ε the error term while $\S$ is the vector of other explanatory variables included in the model. In estimating this model, apart from the main explanatory variable, the study also controls for several factors that could possibly have an influence on the firm performance variable either directly or indirectly, such as: Leverage, Independent directors, Board meetings frequency, Board size, Firm size, Investment, Profitability, Foreign CEO, Growth opportunity and CEO duality. Some of these are discussed in the section 5.5.1 above and the rest below.

Independent variables

Minority & DMinority – The study examines the link between ethnic minority and firm performance. The study seeks to test the business case argument in the literature (Hillman, Cannella, and Harris, 2002; Carter, Simkins, and Simpson, 2003) that competent women and ethnic minority directors are not a substitute for traditional corporate directors but that they have unique characteristics that can create additional value. Using the lens of the resource dependence

theory which suggests that every director comes to the board with unique resources (Hillman., Cannella, and Paetzold, 2000), the variable *Minority (or DMinority)* is included in the model as the main explanatory variable. The study measures Minority as the percentage of ethnic minorities on the board whilst DMinority is measured by a binary, with a value of 1 if at least one ethnic minority is on corporate board, otherwise zero.

Independent directors – The monitoring role of outside directors is an important aspect of firm level corporate governance. The impact that the presence of independent directors on the board has on firm performance generates mixed findings. As discussed in the literature review (section 4.2.1), some studies provide evidence of a negative association between the presence of outside directors on board and firm performance (e.g. Agrawal and Knoeber (1996), while some others provide evidence of a positive association, such as Baysinger and Butler (1985), Bhagat and Bolton (2008), and Jackling and Johl (2009). Following Carter *et al.* (2010), this study includes the proportion of independent directors on the board in its ethnic (or gender) diversity-firm performance relationship models**.**

5.5.6. Executive Directors' Ownership-Performance Relationship Model

The study examines the executive management ownership in relation to the firm's performance. Multiple regression analysis is used to estimate the relationship between their ownership and firm performance. Firm performance is regressed against the measure executive management ownership together with other relevant explanatory variables as expressed in the model below:

$$Firm\ performance = \lambda_0 + \lambda_1 Exec.Direct\_ownership + \sum \lambda æ + \varepsilon \quad \ldots\ldots\ldots\ldots\ldots\ldots \text{ eq. (6)}$$

The study uses the model for testing hypotheses 4. In the model, *Firm performance* is the approximation of Tobin's Q (or Return on Assets) while the proportion of the issued equity shares

owned by the executive management is the proxy for *Exec.Direct_ownership.* In the model, the main explanatory variable is *Executive Directors' Ownership*, $ƛ_0$ is the intercept coefficient, $ƛ_1$ the slope coefficient, ε the error term while æ is the vector of the control variables included in the model. In estimating this model, the study also controls for other ownership types (see 7.2.2 to 7.2.4) and several other factors that could possibly have an influence on the firm performance variable, such as: Leverage, Firm size, Investment, Growth opportunity, operating profit/Sales Ratio, Dividend, Tangible Assets/Sales Ratio and Cashflow. Some of these are discussed below.

Independent variables

Executive directors' ownership – The study examines the relationship between the executive management and firm performance. In their analysis of influence of share ownership between the insiders and outsiders on firm value, Jensen and Meckling (1976) argue that the executives in the firm naturally would tend to allocate resources in their own best interest. It follows therefore that when managers own more shares, they will have less of a tendency to divert the firm's resources away from firm value maximization goal, as this would bring about a closer alignment between their interests and those of the shareholders. As a result, a positive relationship between executive share ownership and firm performance is expected. Morck *et al.* (1988) find a non-linear positive association and Mura (2007) finds a cubic positive relationship between executive share ownership and firm performance. Higher management ownership, however, may result in entrenchment as the managers get more voting power and control, which may not serve the interests of all stakeholders, and the relationship between executive ownership and firm performance would become negative (Claessens *et al*., 2002). This study measures *Executive directors' ownership* as the percentage of the firm's equity shares held by the executive management. The study includes in the model several control variables as discussed below.

Firm size – The inclusion of this variable controls for the effects of size. A large firm may find it easier to access capital and benefit from economies of scale, and may find it easier to cross the entry barrier associated with size. However, monitoring and agency costs can be greater in large firms (Himmelberg, Hubbard and Palia, 1999). An average managerial shareholding is larger in smaller firms; therefore, managerial entrenchment could be more problematic in larger firms (McConnell and Servaes, 1990). Size is measured as *Natural Logarithm* of total assets.

Leverage – It has been argued that a higher level of debt limits the agency problems associated with the managers having access to a large amount of funds (Jensen, 1986); having serviced the debts, managers will have less cash to squander. Another view is that effective monitoring usually comes from the lenders rather than the shareholders, therefore their presence should be associated with better performance (Stiglitz, 1985). The study measures leverage as the ratio of total debt to total assets.

Investment – An item such as investment limits the scope of the manager's discretionary spending. Investments in fixed assets are observable and can be easily monitored, so it has been argued that firms with a greater concentration of fixed or tangible assets in their resource stock will generally have a lower optimum level of managerial ownership (Gertler and Hubbard, 1988). On the other hand, Jensen and Meckling (1976) argue that investment has a positive impact on firm performance. The study could only proxy for investment in fixed capital such as capital expenditure but not soft capital such as Research and Development expenditure as the data is no longer available in the annual reports of Nigerian listed firms. McConnell and Muscarella (1985) provide evidence that the US stock market reacts positively to the announcement of new capital expenditure. The expectation is that investment will have a positive impact on firm performance.

5.5.7. Non-Executive Directors' Ownership–Performance Relationship Model

The study examines the ownership role of the non-executive directors in Nigerian listed firms. Regression analysis is used in estimating the relationship between the non-executive director' ownership and firm performance. In the estimation procedure, firm performance is regressed against the measure of non-executive directors' ownership together with other relevant explanatory variables as stated in the model below:

$$Firm\ performance = Ø_0 + Ø_1 Non\text{-}exec.direct\_ownership + \sum Øɠ + \varepsilon \quad \ldots\ldots\ldots\ldots\ldots\ldots \text{ eq. (7)}$$

The study uses the model for testing hypothesis 5. In the model, *Firm performance* is the approximation of Tobin's Q (or Return on Assets) while the *Non-exec. Direct_Ownership* is proportion of the equity shares owned by non-executive directors. In the model, the main explanatory variable is *Non-Executive Direct_ ownership*, $Ø_0$ is the intercept coefficient, $Ø_1$ the slope coefficient, ε the error term, while ɠ is the vector of the control variables included in the model. In estimating this model, the study also controls for other ownership types and other several factors that could possibly have an influence on the firm performance variable, such as: Leverage, Firm size, Investment, Growth opportunity, Dividend, Tangible Assets/Sales Ratio and Cashflow. Some of these are discussed in section 5.5.5.

5.5.8. Institutional Ownership–Performance Relationship Model

The study also investigates the relationship between institutional ownership and firm performance. In the estimation procedure, firm performance is regressed against the measure of institutional ownership together with other relevant explanatory variables as expressed in the model below:

$$Firm\ performance = \lambda_0 + \lambda_1 institutional\_own + \sum \lambda æ + \varepsilon \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\text{eq. (8)}$$

The study uses the model for testing hypothesis 6. In the model, *Firm performance* is the approximation of Tobin's Q (or Return on Assets) while the proportion of the equity shares owned by the institutional investors is the proxy for *institutional_own.* In the model, the main explanatory variable is *institutional_own*, λ_0 is the intercept coefficient, λ_1 the slope coefficient, ε the error term, while æ is the vector of the control variables included in the model. In estimating this model, the study also controls for other ownership types (see Table 7.5), and several factors that could possibly have influence on the firm performance. These control variables are listed in section 5.5.5. above.

5.5.9. Non-Institutional Ownership–Performance Relationship Model

The study examines the corporate governance role of large Non-Institutional shareholders in Nigerian listed firms. Regression analysis is used in estimating the relationship between the ownership by Non-Institutional investors and firm performance. In the estimation procedure, firm performance is regressed against the measure of Non-Institutional ownership together with other relevant explanatory variables as stated in the model below:

$$Firm\ performance = Ø_0 + Ø_1 Non\text{-}Institutional\_ownership + \sum Øg + \varepsilon \quad \ldots\ldots\ldots\ldots\ldots\text{ eq. (9)}$$

The study uses the model for testing hypothesis 7. In the model, *Firm performance* is the approximation of Tobin's Q (or Return on Assets) while the proportion of the equity shares owned by outside large investors is the proxy for *Non-Institutional ownership.* In the model, the main explanatory variable is Non-Institutional Ownership, $Ø_0$ is the intercept coefficient, $Ø_1$ the slope coefficient, ε the error term, while g is the vector of the control variables included in the model. In estimating this model, the study also controls for other ownership types (see Table 7.2) and several other factors that could possibly have an influence on the firm performance variable, such as:

Leverage, Firm size, Investment, Growth opportunity, Dividend, Tangible Assets/Sales Ratio and Cashflow. Some of these are discussed in section 5.5.1. and below.

Independent variables

Large ownership – The study investigates whether the presence of large outside shareholders or blockholders influences firm performance. Prior studies contend that large investors have a greater incentive to monitor managers (Stiglitz, 1985), as they can easily bear the agency costs and reap more of the benefits arising from increasing stock value (Shleifer and Vishny, 1997). Following Mura (2007), the proxy for blockholding ownership used in this study is the proportion of stock held in block position of more than 3 per cent by all non-managerial shareholders. Although the SEC code 2011 requires all public companies in Nigeria to disclose large share ownership of 5 per cent and above in their annual reports and accounts, the blockholding position commonly used in corporate governance studies is 3 per cent and above. The study also controls for several other ownership characteristics as discussed earlier and below.

Dividends – The contention in some of the studies is that dividends, in a similar manner to leverage, reduce the agency conflicts arising from excess cash in the firm. As dividend payment forces managers to commit cash flow from operations towards fixed charges which is subject to monitoring by external parties, dividend payment thus helps reduce extraction of private benefits of control by managers (Easterbrook, 1984; Jensen, 1986). Following this, the expectation is a positive association between dividends and firm performance. The study measures dividends as the ratio of ordinary dividends minus tax to total assets.

Cashflow – It has been argued that when managers have discretion over large funds, agency conflicts between the managers and shareholders may be greater (Jensen, 1986); thus, the relationship between cashflow and firm performance will be negative. It may be argued, however,

that if the amount of cashflow enables firms to finance investments inwardly, and thus reduce underinvestment and safeguard the firm from the risk of becoming bankrupt, then greater cashflow would be expected to have a positive association with firm performance. The proxy for cashflow, following Mura, (2007) is the ratio of pre-tax profits plus depreciation to total assets.

Operating Profit/Sales Ratio – The study also controls for free cash flow. The ratio of operating income to sales is included as a measure of firm market power or its free cashflow. Free cashflow itself is unobservable and correlates with operating income (Himmelberg, Hubbard and Palia, 1999). Jensen (1986) argues that, the higher the firm's free cashflow, ceteris paribus, the higher is the desired level of managerial ownership; suggesting therefore that there is positive association between a firm's free cashflow and firm performance.

Tangible Assets/Sales Ratio – This variable is included in the model as a measure of the alleviation of agency problems since such assets are easily monitored and provide good collateral (Himmelberg, Hubbard and Palia, 1999).

Variables	Definition	Source
Performance variable (Dependent variables)		
Return on assets	Earnings before tax scaled by Total Assets	Core, Holthausen & Larcker (1999); Anderson and Reeb, (2003); Munisi and Randoy, (2013);
Tobin's Q	Using Chung and Pruitt (1994) approximation Tobin's Q equals (The market value of firm's common stock + liquidating value of preferred stock+ book value of debt) divided by the book value of total assets.	Chung and Pruitt (1994) Carter et al., (2010)
Board composition (Independent variables)		
Executive directors	The Proportion Executive Directors sitting on the board	Mura (2007)
Non-executive directors	The Proportion of Non-Executive Directors sitting on the board	Mura (2007)
Independent directors (Board independence)	The Proportion of Independent Non-Executive Directors sitting on the board	Bhagat and Black (2002); Satia-Atmaja (2009); Liu et al., (2015)
Control variables (Independent variables)		
Board size	Natural Log Number of Directors on the board	Liu et al., (2015);
Firm size	The natural logarithm of total assets	Mura (2007) Satia-Atmaja (2009);
Leverage	The Book Value of Debts divided by Total Assets	Mura (2007) Satia-Atmaja (2009);
Investment	Capital expenditure scaled by assets	Mura (2007); Satia-Atmaja (2009)
Dividends	Is measured as ordinary Dividend (net of tax) divided by Total Assets.	Mura (2007)

CEO Tenure	The number of years the CEO remains in office as the CEO of the company.	Satia-Atmaja (2009)
Cash flow	Measured as the ratio of pre-tax profit plus depreciation divided by total assets	Mura (2007)
CEO Duality	A dichotomous variable that takes value of 1, when a single individual holds both the office of the CEO and board's chair	Satia-Atmaja (2009); Liu et al., (2015);
Dummy variables		
Year Dummy	A binary variable with respect to year in which a firm takes value of one in a particular year, and zero in each of the other years	Satia-Atmaja (2009); Liu et al., (2015);
Industry Dummy	A dummy variable which takes value of one when firm is a manufacturing/Oil & Gas/Services/Merchandising, and zero otherwise	Satia-Atmaja (2009); Liu et al., (2015);

Table 5.2: Variables Description for Board Independence-Performance Relationship

Variables	**Definition**	**Source**
Performance variables (Dependent variables)		
Return on assets	Earnings before tax scaled by Total Assets	Core, Holthausen & Larcker (1999); Anderson and Reeb, (2003); Munisi and Randoy, (2013);
Tobin's Q	Using Chung and Pruitt (1994) approximation Tobin's Q equals (The market value of firm's common stock + liquidating value of preferred stock+ book value of debt) divided by the book value of total assets.	Chung and Pruitt (1994) Carter et al., (2010)
Ownership Structure (Independent variables)		
Executive director ownership	Is measured as the proportion of the firm's issued equity	Mura (2007)

	shares that is held by the executive management	
Non-executive ownership	Is measured as the proportion of the firm's issued equity shares that is held by the non-executive directors	Mura (2007)
Institutional ownership	Is measured as the proportion of the firm's issued equity shares, that is held by the institutional investors (of 3% and above ownership)	Mura (2007)
Non-institutional ownership	Is measured as the proportion of the firm's issued equity shares, that is held by the Non-institutional investors (of 3% and above ownership)	Mura (2007)
Closely-held	A binary variable that equals one if a firm has a blockholder holding at least 20 per cent of the firm's shares, otherwise zero.	Satia-Atmaja (2009)
Control variables (Independent variables)		
Firm size	The natural logarithm of total assets	Mura (2007) Satia-Atmaja (2009);
Leverage	The Book Value of Debts divided 7 by Total Assets	Mura (2007) Satia-Atmaja (2009);
Investment	Capital expenditure scaled by assets	Mura (2007); Satia-Atmaja (2009)
Dividends	Is measured as ordinary Dividend (net of tax) divided by Total Assets.	Mura (2007)
Cash flow	Measured as the ratio of pre-tax profit plus depreciation divided by total assets	Mura (2007)
Tangible assets/Sales ratio	Tangible Assets/Sales Ratio is tangible assets divided by sales revenue.	Himmelberg et al., (1999) Mura (2007)
Dummy variables		
Year Dummy	A binary variable with respect to year in which a firm takes value of one in a	Himmelberg et al., (1999) Mura (2007)

	particular year, and zero in each of the other years	
Industry Dummy	A dummy variable which takes value of one when firm is a manufacturing/Oil & Gas/Services/Merchandising, and zero otherwise	Himmelberg et al., (1999) Mura (2007)

Table 5.3: Variables Description for Ownership-Performance Relationships

Variables	**Definition**	**Source**
Performance variables (Dependent variables)		
Return on assets	Earnings before tax scaled by Total Assets	Core, Holthausen & Larcker (1999); Anderson and Reeb, (2003); Munisi and Randoy, (2013);
Tobin's Q	Using Chung and Pruitt (1994) approximation Tobin's Q equals (The market value of firm's common stock + liquidating value of preferred stock+ book value of debt) divided by the book value of total assets.	Chung and Pruitt (1994) Carter et al., (2010)
Board diversity (Independent variables)		
Women	The proportion of the board members that are females.	Carter, Simkins and Simpson (2003) Campbell and Minguez-Vera (2008);
DWomen	Measured as a binary variable that takes value of 1 when there is at least one female on the board and zero otherwise	Carter, Simkins and Simpson (2003); Campbell and Minguez-Vera (2008).
Ethnic Minority	Is proxied for by the percentage of ethnic minority directors' origin on the board.	Carter, Simkins and Simpson (2003); Campbell and Minguez-Vera (2008)
DEthnic Minority	It is measured, as a binary variable that takes value of 1 when there is at least one ethnic minority on the board of directors and zero otherwise.	Carter, Simkins and Simpson (2003); Campbell and Minguez-Vera (2008

Control variables (Independent variables)		
Board size	Natural Log Number of Directors on the board	Liu et al., (2015);
Independent directors	The Proportion of Independent Non-Executive Directors sitting on the board	Bhagat and Black (2002); Satia-Atmaja (2009); Liu et al., (2015)
Firm Size	The natural logarithm of total assets	Mura (2007) Satia-Atmaja (2009);
Leverage	The Book Value of Debts divided by Total Assets	Mura (2007) Satia-Atmaja (2009);
Investment	Capital expenditure scaled by assets	Mura (2007); Satia-Atmaja (2009)
Dividend	Is measured as ordinary Dividend (net of tax) divided by Total Assets.	Mura (2007)
CEO-Tenure	The number of years the CEO remains in office as the CEO of the company.	Satia-Atmaja (2009)
Cashflow	Measured as the ratio of pre-tax profit plus depreciation divided by total assets	Mura (2007)
Bmeeting Frequency	Measured as a Natural logarithm of the number of times the board meetings are held in a year.	Carter et al. (2010)
Foreign CEO	A binary with the value of one if the CEO is a foreigner otherwise zero	Heugens, Essen and Oosterhout (2008)
Dummy variables		
Year Dummy	A binary variable with respect to year in which a firm takes value of one in a particular year, and zero in each of the other years	Carter, Simkins and Simpson (2003)
Industry Dummy	A dummy variable which takes value of one when firm is a manufacturing/Oil & Gas/Services/Merchandising, and zero otherwise	Campbell and Minguez-Vera (2008)

Table 5.4: Variables Description for Gender and Ethnic Minority Directors -Performance Relationship.

5.6. Methods of estimation

The analyses carried out in this study involve the use of different econometric techniques for estimating the regression models. In addition to providing the opportunity for a robustness check, the approach helps in addressing the problems of bias, inconsistency and inefficiency, common with inferences made when using certain estimation techniques. The approach is also adopted because each individual estimator has its own peculiar assumptions and criteria for validity of the estimation results.

Ordinary Least Squares (OLS) estimation

The study uses the OLS technique which is the very basic estimator. With a simple OLS regression model like $y = \alpha + \beta*x$, alpha and beta are estimates of the unknown parameters. The $yhat = \alpha hat + \beta hat *x$, estimates the mean function or the systematic part of the regression equation. Given that, a random variable can be predicted best by the mean function (under the mean squared error criterion), thus yhat can be interpreted as the best prediction of y. The difference between the dependent variable y and its least squares prediction is the least squares residual, i.e. $\varepsilon = y- yhat = y- (alpha+beta*x)$. A large residual ε can either be due to a poor estimation of the parameters of the model or to a large unsystematic part of the regression equation. For the OLS model to be the best estimator of the relationship between x and y, several conditions[21] must be met. If these ideal conditions are completely met, then one can argue that the OLS estimator mirrors the properties of the unknown model of the population, thus, suggesting that the explanatory variables and the error term are uncorrelated. However, given the fact that these ideal conditions are rarely fully

[21] Complete ideal conditions, i.e. the Gauss-Markov conditions

met, this might lead to bias and/or inconsistent inferences. Therefore, other estimators that are more sophisticated than OLS estimator may have to be employed to address these issues.

Generalized Least Squares (GLS) estimation

The GLS estimator can be an econometric solution to many violations of the Gauss-Markov conditions for OLS estimators such as autocorrelation, heteroskedasticity, nonlinearity, non-correlation of independent variables with error terms and multi-collinearity, since the Omega matrix can be flexibly specified.

The Omega matrix is not usually known since it must be estimated, the GLS estimator therefore becomes FGLS (Feasible Generalized Least Squares). The estimator appears to be an advancement over the OLS technique. The result of the Breusch-Pagan Lagrange Multiplier (LM) Test carried out indicates that the RE is more suitable for analysing the study's models. This therefore informs the use of RE GLS for the empirical analysis. Unlike the Fixed Effects model, the Random Effects model assumes that the variation across entities is random and uncorrelated with the predictors (independent variables) included in the variables. Furthermore, the random effects also assume that the entity's error term is not correlated with the predictors, thus allowing for time-invariant variables to play a role as an explanatory variable (Torres-Reyna, 2007). The RE model allows for the generalization of the inferences beyond the sample used in the model. The use of RE requires the need to specify those firm's individual characteristics that may or may not influence the independent variables. However, due to the unavailability of certain variables, the RE may bring about the problem of omitted variables bias in the model.

Dynamic Panel (GMM) estimation

Further to the discussion earlier, it is necessary to control for endogeneity and unobservable heterogeneity (fixed effects) when estimating the relationship between the board or ownership structure and firm performance. It has been argued in many of the prior studies (e.g.

Mura, 2007; Munisi and Randoy, 2011; Liu *et al*., 2015) that all regressors are potentially endogeneous as the shocks that affect corporate performance may possibly affect regressors as well, such as leverage, dividend, investment, etc. In addition, reversal causality makes the board (Hermalin and Weisbatch, 2003) or ownership structure be endogenously determined (Mura, 2007). For example, board composition or managers' equity ownership may have an impact on and be influenced by firm performance. Furthermore, the presence of unobservable firm-specific characteristics that correlate with independent variables is another source of endogeneity (Wooldridge, 2002).

It is important to control for fixed effects as well, to limit the omitted variable bias (Himmelberg *et al*., 1999; Chi, 2005). Without controlling for endogeneity and unobservable fixed effects, OLS and GLS inferences could be biased. Therefore, the study estimates the following model using the dynamic panel (GMM) technique.

$$P_{it} = \beta_1 P_{it-1} + \Sigma\ \beta_k \lambda_{it} + \varepsilon_{it} \qquad \varepsilon_{it} = \nu_i + \nu_{it} \quad \text{..... eq.1}$$

where ν_i is the firm specific component of the error term and ν_{it} an idiosyncratic error term.
To address the endogeneity issues, the study estimates Arellano and Bond's (1991) Generalized Method of Moments model (Differenced – GMM). Arellano and Bond (1991) in dealing with the endogeneity problem suggest first taking differences and then using suitable lagged levels of dependent variables as instruments. Taking differences first transforms predetermined variables into endogenous ones, as follows:

$$\Delta P_{it} = \Delta\ \beta_1 P_{i,t-1} + \Sigma\ \Delta\ \beta_k \lambda_{it} + \ \Delta\nu_i + \Delta\nu_{it} \quad \text{.....eq.2}$$

With the assumption of no serial correlation in the error term, the first and second lagged levels can be used as instruments for the endogenous variables. Since the validity of the GMM model relies largely on the absence of higher order serial correlation, the study tests for

autocorrelation of order 1 and 2. This test the null hypothesis of zero correlation between the instruments and the error term, where rejection of the null casts doubt on the validity of the instruments.

Blundell and Bond (1998) note that the Differenced-GMM may, however, be likely to have a finite sample bias when weak instruments are used. To address this problem, the study uses the GMM-Systems method of estimation, which includes level equations. Under this method, lagged first-differences are used as instruments for level equations and the lagged level terms are used as instruments for equations in first differences. Blundell and Bond (1998) demonstrate that this process shows a significant gain in asymptotic efficiency.

5.7. Summary

This section specifies the models for estimating the relationship between corporate governance and firm performance. It discusses the variable measures used in the estimation, gives the models, states the justification for their use, and cites prior studies that use such variables. It also specifies and discusses the methodology employed. The detailed step-by-step approach taken when estimating the models are contained in the empirical chapters numbers five to seven.

CHAPTER SIX: BOARD INDEPENDENCE AND FIRM PERFORMANCE

6.1. Introduction

In this chapter, the study empirically examines the relationship between the independent directors sitting on the boards of Nigerian listed firms and firm performance. From the agency theory perspective, the interests of the manager and shareholder may not be at congruence, and the board is the mechanism for aligning those interests through monitoring and ratifying of management decisions (Jensen and Merckling, 1976). The outside directors, sometimes referred to as independent directors, are regarded as better monitors; and the expectation is that their presence on the board will help to curb the excesses of self-serving managers, ensure effective monitoring in the firm and thus improve firm performance. The degree of independence may, however, depend on the type of outsider director. Of course, an outsider director who has a contractual or other form of relationship with the firm or its management would be less independent compared with an outsider director who does not have any relationship with the firm besides his directorship.

In this chapter, the researcher seeks to investigate three important questions. First, the study considers whether the presence of outsider directors on the corporate board has an impact on firm performance. Second, the study examines whether ownership concentration affects the decisions on board independence; and third, the study investigates whether the impact of board independence on firm performance is moderated by ownership concentration.

6.2. Descriptive statistics

Table 6.1 below provides descriptive statistics for the sample used in the study to analyse the relationship between board independence and firm performance. The measure of financial performance as approximated by Tobin's Q has a mean value of 1.72. As this is above the threshold of one, it suggests that the firms' market value in the sample is greater than the book value of their

assets. It implies that the firms were on average financially successful over the twelve-year period being investigated. The accounting measure of performance, however, reveals an average of less than 1 per cent return (i.e. 0.7%) on the use of assets which can be considered as poor performance relative to the market valuation.

The average number of directors on the board is approximately 9, out of which an average of 6 (i.e. 67%) are Non-Executive directors (NEDs) and 3 (i.e. 33%) are Executive directors. The average proportion of Independent Non-Executive Directors is about 19 per cent. This suggests that the boards of the Nigerian listed firms are composed mainly of outsider

Table 6.1

Descriptive Statistics

Variables	Observation	Mean	Std. Dev	Min	Max
Performance					
ROA	910	0.007	1.843	-53.70	0.956
Tobin's Q	931	1.727	4.90	0.001	8.77
Board Composition					
Executive Directors (Number)	940	3.00	1.45	0.00	12.00
Independent Directors (Number)	850	2.00	0.13	1.00	4.00
Independent Directors (Percentage)	850	0.19	0.11	0.06	0.78
Non-executive Directors (Number)	940	6.00	2.14	1.00	14.00
Board Size (Number of Directors)	937	9.00	2.44	0.00	19.00
Control Variables					
Firm Size (Natural Logarithm)	949	8.84	1.79	2.72	13.92
Leverage (%)	973	0.23	0.22	0.00	1.18
Investments (%)	955	0.09	0.1	0.00	1.26
Dividend (%)	596	0.06	0.17	0.00	3.05
CEO-Tenure (Years)	988	5.42	4.86	0.00	29.00
Cash flow (%)	970	0.14	0.91	-1.22	28.00
CEO Duality	955	0.05	0.22	0.00	1.00

Table: 6.1. Descriptive Statistics

Directors, of which about one-fifth (19 per cent) on average comprises independent non-executive directors. As depicted in figure 6.1 above, the representation by independent non-executive directors on the Nigerian boards remains relatively stable over the research period, although the trend nosedived in 2015 possibly because of insufficient data collection for that year. The table reveals that, in 5 per cent of the firm years, the position of CEO and chairperson of the board were combined. The table also shows that firms report on average a dividend-to-assets ratio of 6 percent. The CEO's tenure in office is on average 5 years, which suggests that entrenchment by the CEO is not an issue.

6.3. The results

Table 11 in the Appendix reports the Pearson's correlation coefficient among the variables used in the independent board-performance regressions. The table indicates that correlations among variables are not too high when running the regressions. The study calculates the variance inflation factors (VIFs) to ensure that highly correlated variables are excluded from the regression estimations. The VIF values for individual variable remains below 5.0 and the mean is below threshold of 10. The overall results suggest that multicollinearity is not a potential problem in the multiple regressions carried out in this study.

6.3.1. Independent Board-Performance Relationship

Tables 6.2-6.6 present the regression results of the relationship between board independence and firm performance. The variables used in the analysis are defined as follows: *Tobin's Q is* the sum total of market value of the firm's common stock plus the liquidating value of preferred stock plus the book value of debt, divided by the book value of total assets. *ROA* is earnings before tax scaled by assets. *B_ind* is the proportion of Independent Non-Executive Directors on the board. *CEO Tenure* is the number of years the CEO is in office. *Leverage* is the

book value of debts divided by total assets. *Board size* is the natural logarithm of the number of directors on the board. *Investment* is the ratio of capital expenditure to total assets. *Firm Size* is the natural logarithm of firm's total assets. *Profitability* is earnings before tax scaled by total assets. *Growth Opportunity* is the average growth in sales revenue in the previous year. *CEO Duality* is a dichotomous variable that takes the value of 1 when a single individual holds both the office of the chief executive officer and the chairperson of the board.

The common opinion in the literature (e.g. Mura, 2007; Satia-Atmaja, 2009) on corporate governance is that outsider directors are better monitors relative to insider directors, and that their presence will curb the excesses of the executive management and of course improved firm performance. The study performs an empirical test on this proposition starting with the very basic estimation technique of Ordinary Least Squares (OLS). The measures of performance used in the study are *Tobin's Q* and *ROA* respectively. The main explanatory variable is the Independent Directors. The study controls for firm characteristics that may have an impact on the regression and help explain firm performance such firm size, board size, growth opportunities

Table 6.2
Estimations of the Relationship Between Board Independence and Firm Performance

Dependent Variable: Tobins'Q	Ord. Least Squares	Random Effect	Arellano-Bond	Arellano-Bover/Blundell-Bond
Variable	(OLS)	GLS	GMM-Diff	GMM-System
B_ind	10.45***	5.13**	10.73*	22.25***
	(5.27)	(2.57)	(1.94)	(4.50)
CEO Tenure	0.53**	0.14	0.18	0.03
	(2.02)	(0.54)	(0.37)	(0.06)
Firm Size	-0.41***	-0.71***	-6.17***	-2.55***
	(-3.02)	(-4.32)	(-10.42)	(-6.27)
Leverage	2.13**	0.31	-0.54	-0.08
	(2.23)	(0.32)	(-0.29)	(-0.04)
Board Size	3.93***	3.00**	1.17	4.70**
	(5.27)	(3.74)	(0.57)	(2.43)
Profitability	0.03	0.01	2.42	3.62***
	(0.26)	(0.12)	(0.69)	(3.09)
Investment	-0.93	0.05	0.69	1.86
	(-0.48)	0.03	(0.23)	(0.58)
Growth Opportunity	0.00	0.00	-0.57	-0.10
	(0.25)	(0.02)	(-0.6)	(-0.1)
CEO Duality	-1.39	-0.79	3.12	2.70
	(-1.44)	(-0.82)	(1.13)	(1.03)
Constant	-6.9***	-0.01	53.31***	0.09
	(-3.02)	(-0.00)	(5.01)	(0.01)
(t-2) Tobins'Q			-0.05	0.13***
			(-1.01)	(3.35)
Industry Dummy	Included	Included	Included	Included
Year Dummy	Included	Included	Included	Included
R-Square	0.1368	0.1046		
F Value	4.55			
P Value	0.00			
Wald chi2		58.75	206.32	533.14
Prob > chi2			0.00	0.00
AR (1) test (p-value)			0.27	0.25
AR (2) test (p-value)			0.28	0.40
Observation	684	685	290	395

Notes: This table reports results of regressions of the relationship between firm performance and board independence. The regression coefficients are reported

with the associated t-values (or z-values) in parenthesis. The significance level is described as follow: *** indicates significant at 0.10 level; ** indicates significant; at 0.05 level; * indicates significant at 0.10 level

Table 6.2: Estimation of the Relationship Between Board Independence and Firm Performance

CEO duality, investments, profitability, leverage and CEO tenure. The regression model also includes the industry and years dummies in order to control for the impact that industries may have on their performance, as well controlling for the years' effects on the estimation.

The results presented in column 1, Table 6.2, reveal there is a positive and significant relationship between the independent directors sitting on the board and firm market performance (i.e. $t = 5.27$, $p < 0.01$). However, the result obtained when the accounting performance measurement is used reveals a positive but insignificant relationship between the proportion of independent directors and firm performance. The result provides support for Hypothesis 1a. It suggests that firms may improve their performance by increasing the proportion of independent directors on their boards.

Table 6.3
Estimations of the Relationship Between Board Independence and Firm Performance

Dependent Variable: ROA	**Ord. Least Squares**	**Random Effect**	**Arellano - Bond**	**Arellano - Bover/Blundell-Bond**
Variable	**(OLS)**	**GLS**	**GMM-Diff**	**GMM-System**
B_ind	0.18	0.19	0.25**	2.16***
	(0.24)	(0.24)	(2.38)	(2.6)
CEO Tenure	0.16	0.16	0.00	0.57***
	(1.58)	(1.55)	(-0.28)	(6.78)
Firm Size	0.61	0.06	0.03*	0.65***
	(1.14)	(1.11)	(1.77)	(7.68)
Leverage	-1.2***	-1.19***	0.04	-2.35***
	(-3.25)	(-3.18)	(0.96)	(7.08)

Board Size	0.11	0.10	-0.02	-0.33
	(0.37)	(0.34)	(-0.56)	(-0.97)
Investment	0.89	0.87	0.12**	0.79
	(1.17)	(1.14)	(2.11)	(1.45)
Growth Opportunity	0.00	0.00	0.00	-0.14
	(-0.19)	(-0.18)	(0.05)	(-0.85)
CEO Duality	0.13	0.13	0.02	-0.47
	(0.34)	(0.33)	(0.36)	(-1.2)
Constant	0.45	-0.05	-0.36	-11.7
	(-0.50)	(-0.5)	(-1.42)	(-8.57)
(t-2) ROA			-0.11*	-2.92***
			(-1.8)	(-8.57)
Industry Dummy	Included	Included	Included	Included
Year Dummy	Included	Included	Included	Included
R-Square	0.0378	0.0378		
F Value	1.2			
P Value	0.23			
Wald chi 2		25.67	69.87	652.12
Prob > chi2			0.00	0.00
AR (1) test (*p-value*)			0.01	0.31
AR (2) test (*p-value*)			0.65	0.60
Observations	696	696	281	384

Notes: This table reports results of regressions of the relationship between firm performance and board independence. The regression coefficients are reported with the associated t-values (or z-values) in parenthesis. The significance level is described as follow: * significant at the 0.10 level; ** significant at the 0.05 level; * ** significant at the 0.01 level

Table 6.3: Estimation of the Relationship Between Board Independence and Firm Performance

The study performs the Random Effects Estimations to further analyse the board independence-firm performance relationship. The random effect technique is normally employed in regression analysis when it is assumed that the variation across entities is random and uncorrelated with the predictor or independent variables included in the model (Torres-Reyna, 2007). The study performs the Breusch-Pagan Lagrange multiplier (LM) test in deciding between the use of OLS and Random effects regression. The test rejects the null hypothesis (Prob > chi2 = 0.000) that variance across entities is zero, which implies that the use of the random effects

technique is more appropriate; therefore, the study performs the Random Effect Estimations. Two performance variable measures are used in the estimation (i.e. the Tobin's Q and ROA). The main explanatory variable is the proportion of the independent directors on the corporate board. The study controls for the influence that certain firm's characteristics may have on the relationship estimation, such as board size, firm size, leverage, growth opportunities, CEO tenure, profitability and CEO duality. Tables 6.2 and 6.3 contain empirical results for testing hypothesis 1, using the RE estimator. The results presented in column 2, Table 6.2 (i.e. $z = 2.57$, $p < 0.05$) indicate that there is a positive and significant association between the percentage of independent directors on the board and company market performance. This suggests that the greater the number of independent directors on a board, the better the company's performance. The result provides support for Hypothesis 1a. It underscores the important role that independent directors can play in the corporate governance of listed companies. Using the accounting measure of performance, the result in column 2 of Table 6.3 does however reveal a positive but insignificant relationship between the independent directors' proportion on the board and the accounting performance measure.

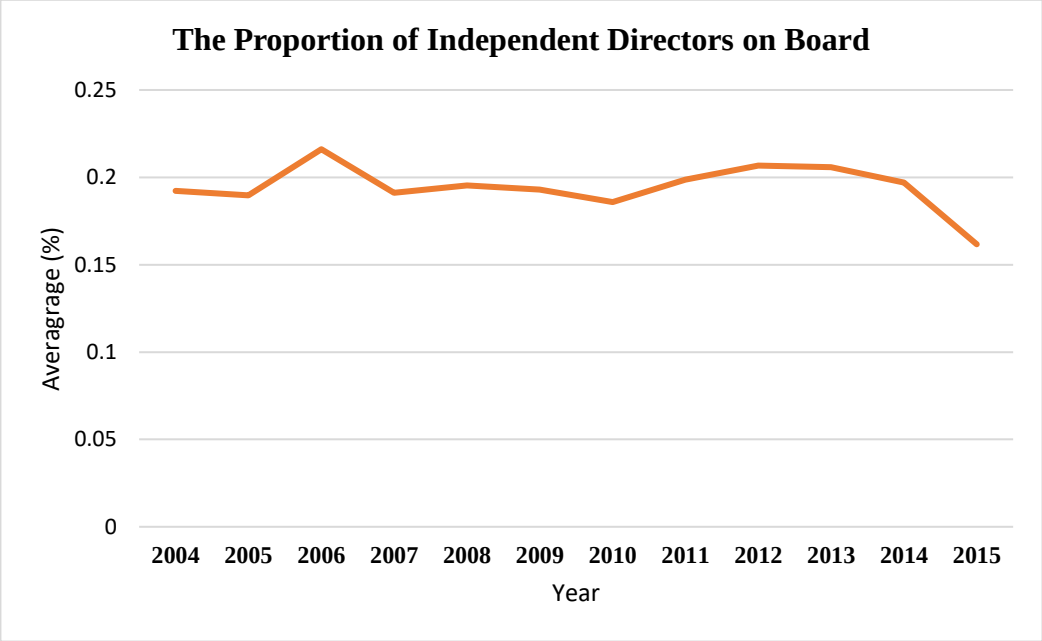


Figure 6.1.: The trend of Board Independence in Nigerian Corporate Boards (2004-2015)

As is common with most empirical corporate finance research, the analysis of the relationship between the board composition and firm performance does face the challenge of endogeneity which may arise due to unobserved heterogeneity, simultaneity and reverse causality (Adams *et al*., 2010; Wintoki *et al.,* 2012; Liu *et al.,* 2015).

Although the IV estimator is often used to address the endogeneity problem, the concern in some literature (e.g. Filatotchev & Wright, 2017; Liu *et al.,* 2015, Mileva, 2007;) lies with the problem of selecting good instruments. Because, with weak instruments the IV-2LS and 3 SLS technique respectively is likely to be biased in terms of the OLS estimators. Therefore, to address possible endogeneity issues in the regression model, the study in addition to OLS and GLS uses the Dynamic GMM technique to estimate the relationship. The dynamic panel-data estimation techniques help to address better the endogeneity issues resulting from unobserved heterogeneity, simultaneity and reversal causality. Following Wintoki *et al*. (2012), the following regression model is estimated:

$P_{it} = \beta_1 P_{it-1} + \beta_2 B\_ind_{it} + \beta C_{it} + \mu_{it}$ …….. eq. (1)

$\mu_{it} = V_i + e_{it}$ ….....eq. (2)

Basic problems include the fact that time invariant firm characteristics (i.e. fixed effects such as the industry and years effects) may correlate with the explanatory variables. The unobserved panel-level effects (fixed effects) may also correlate with the lagged dependent variable, therefore making standard estimators inconsistent (Mileva, 2007). The fixed effects are

usually contained in the error term (as shown in equation 1 above) which consists of the unobserved firm-specific effects, V_i. and the observation specific errors e_{it}.

To address these issues, the study uses the Differenced GMM technique to transform the equation into:

$\Delta P_{it} = \beta_1 \Delta P_{i,t-1} + \beta_2 \Delta INEDs_{it} + \beta_3 \Delta C_{it} + \Delta\mu$ ..... eq. (3)

With the transformation of the regressors, (i.e., by first differencing) the fixed firm-specific effect is removed, as it does not vary with time. Included in the differenced GMM model is the lagged level (t-2) of endogenous regressors. The proportion of independent directors sitting on the corporate board and Board Size are treated as endogenous variables. The CEO-duality and Firm Size are included as pre-determined variables. The dependent variables (i.e., Tobin's Q / ROA) included in the regression model are lagged back from period t-2. All other variables in the regression model, including both the industry and years dummies, are treated as exogenous variables.

Tables 6.2 and 6.3 present the results of independent board performance regression using the Difference GMM. In column 3, Table 6.3, the coefficient on Independent Director is positive and marginally significant, suggesting that independent directors on corporate boards enhance firm market value. The result (i.e., $z = 1.94$, $p < 0.10$) provides support for Hypothesis 1. In the same vein, the result in column 4, Table 6.3 uses the accounting performance measure. It also shows that there is a positive and significant association between independent directors and a firm's accounting performance. The result (i.e. $z = 2.38$, $p < 0.05$) suggests that more independent boards improve firm performance. The result provides support for Hypothesis 1a.

Extending the work of Arellano-Bond (1991), Blundell and Bond (1998) show that the lagged-level instruments in the Arellano-Bond estimator may become weak as the autoregressive

process becomes too persistent or the ratio of the variance of the panel-level effects (*vi*) to the variance of the idiosyncratic error (*εit*) becomes too large (Blundell and Bond, 1988). In order to overcome this problem, they propose a system of estimator that uses moment conditions involving the inclusion in the regression model of the lagged differences as instruments for the level equation. Given its improved efficiency, the study thus uses the Arellano-Bover/Blundell-Bond system estimator. In the estimation of the independent board-performance relationship, the lagged differences of the dependent variable are included as instruments for the levels equation. That is, the first-differenced lagged dependent variable is instrumented with its past levels.

Tables 6.2 and 6.3 present the results of the independent director and performance relations regression using the Arellano-Bover/Blundell-Bond system estimator. In column 4, Table 6.2, the coefficient of Independent Director is positive and significant using the market measure of performance. The result (i.e. $z = 4.50$, $p < 0.01$) suggests that a more independent board enhances firm value. A similar result is obtained when using the accounting measure of performance. The result presented in column 4, Table 6.3 (i.e., $z = 2.60$, $p < 0.01$) shows a positive relationship between independent directors and performance. It thus suggests that increasing the proportion of independent directors on the board would improve firm performance. All the results on Table 6.2 show a positive and significant relationship between the proportion of independent directors on the board and firm performance. The result provides support for hypothesis 1 and is consistent with prior studies (Satia-Atmaja, 2009; Liu et al., 2015; Chen, 2015)

6.3.2. Independent Directors and Ownership Concentration

The study examines the relationship between the independence of the board and concentration of the firm's ownership, and presents the results of the estimation in Table 6.4 below:

Table 6.4
Estimations of the Relationship Between Board Independence and Ownership Concentration

Dependent Variable: B_ind	Ord. Least Squares	Random Effect	Arellano-Bond	Arellano-Bover/Blundell-Bond
Variable	**(OLS)**	**GLS**	**GMM-Diff**	**GMM-System**
Closely_held	-0.01	-0.00	-0.00	-0.01
	(-1.11)	(-0.47)	(-0.05)	(-0.45)
CEO_Tenure	-0.01**	-0.01**	-0.02**	-0.02**
	(-1.99)	(-2.52)	(-2.12)	(-2.38)
Firm Size	0.01***	0.00	-0.02	0.02**
	(4.40)	(1.20)	(-1.64)	(1.99)
Leverage	-0.00	0.01	0.04	0.04
	(-0.23)	(0.52)	(1.36)	(1.44)
Board Size	-0.06***	-0.07***	-0.06	-0.01
	(-3.99)	(-4.20)	(-1.33)	(-0.38)
Profitability	0.00	0.00	0.08	-0.01
	(0.23)	(0.04)	(1.47)	(-0.34)
Investment	0.04	0.01	-0.06	-0.05
	(0.99)	(0.33)	(-1.19	(-1.03)
Growth Opportunity	0.00	0.00	-0.02	-0.01
	(0.29)	(0.13)	(-1.21)	(-0.94)
CEO_Duality	-0.02	-0.02	-0.06	-0.05
	(-1.14)	(-1.02)	(-1.28)	(-1.26)
Constant	0.21	0.27***	0.8***	0.14
	(4.71)	(5.62)	(3.30)	(1.05)
Industry Dummy	Included	Included	Included	Included
Year Dummy	Included	Included	Included	Included
R-Squared	0.0756	0.05535		
F Value	2.39			
P Value	0.0003			
Wald chi2		41.17	51.10	132.28
Prob > chi2		0.0113	0.0007	0.0000
AR (1) test (*p-value*)			0.00	0.00
AR (2) test (*p-value*)			0.26	0.57
Observations	695	695	304	415

Notes: This table reports results of regressions of the relationship between Ownership Concentration and Board Independence. The regression coefficients are reported with the associated t-values (or z-values) in parenthesis. The significance level is described as follow:

* significant at the 0.10 level; ** significant at the 0.05 level; * ** significant at the 0.01 level

Table 6.4: Estimation of the Relationship Between Board Independence and Ownership Concentration

Column 1, Table 6.4 reveals the result of the OLS estimation of the relationship. The coefficient on Closely_held is negative but not significant at the conventional level. This suggests an insignificantly negative relationship between board independence and ownership concentration. Column 2, Table 6.4 presents the result of the estimation of the relationship between board independence and ownership concentration using the GLS estimator. The coefficient on Closely_held in a similar manner is negative but also not significant at the conventional level. This suggests an insignificantly negative relationship between board independence and ownership concentration. Column 3, Table 6.4 presents the result of estimation of the relationship between board independence and ownership concentration using the GMM-Diff estimator. The coefficient on Closely_held, as with other estimators is negative but not statistically significant at the conventional level. Using the GMM-System estimator, column 4, Table 6.4 reveals the result of the estimation of the relationship between board independence and ownership concentration. The coefficient on Closely_held like with other estimators is negative but not statistically significant at the conventional level. Although the direction of the relationship remains negative, the impact however, is not statistically significant. Given the direction of the relationship the result nevertheless suggests that, large shareholders in the closely-held firms prefer a lower proportion of independent directors on their boards, but ownership concentration per se does not appear to influence decisions on board independence. The study thus fails to provide support for hypothesis 2 as the result not statistically significant.

6.3.3. Moderation Effect of Ownership Concentration

The impact of many important governance mechanisms on performance depends largely on firms' ownership structure (Bebchuk & Hamdani, 2009). The ownership concentration is widely believed to possibly have a considerable impact on corporate governance, as it may mitigate or exacerbate agency problems in the firm. For example, the presence of large equity shareholders on the board may help reduce the agency problem as they have the incentive and resources to monitor the management. The minority shareholders' expropriation on the other hand tends to be predominant in the closely-held firms. The estimation results presented in Table 6.2 show a positive and significant association between board independence and firm performance. However, the question is whether these positive relationships are moderated by ownership concentration. In this section of the chapter therefore, the study examines whether the impact of board independence on firm performance is significantly influenced by ownership structure. The board independence is measured as the proportion of independent directors on the board, while closely-held firms is used as a proxy for ownership concentration. The latter is measured by a binary, with a value of one if a firm has a blockholder holding at least 20 per cent of the issued shares and zero otherwise.

Table 6.5
Estimations of the Relationship Between Board Independence and Firm Performance: The Moderation Effect of Ownership Concentration

Dependent Variable: Tobin's Q	Ord. Least Squares	Random Effect	Arellano-Bond	Arellano-Bover/Blundell-Bond
Variable	(OLS)	GLS	GMM-Diff	GMM-System
B_ind	2.49	1.67	-2.75	2.43
	(0.66)	(0.46)	(0.24)	(0.24)
CEO_Tenure	0.58**	0.14	0.63	-0.19
	(2.24)	(0.55)	(0.13)	(-0.39)

Firm Size	-0.48***	-0.73***	-6.20***	-2.75***
	(-3.49)	(-4.44)	(-10.46)	(-6.75)
Leverage	2.33**	0.41	-0.13	1.00
	(2.45)	(0.43)	(-0.07)	(0.55)
Board Size	3.93***	3.12***	1.47	4.83**
	(5.28)	(3.88)	(0.70)	(2.54)
Profitability	0.02	0.01	3.55	3.89
	(0.16)	(0.08)	(0.98)	(3.34)
Investment	-0.59	0.04	0.04	0.94
	(-0.31)	(0.02)	(0.01)	(0.29)
Growth Opportunity	0.00	0.00	-0.64	-0.29
	(0.21)	(0.02)	(-0.67)	(-0.30)
CEO_Duality	-1.34	-0.76	3.08	2.51
	(-1.39)	(-0.79)	(1.12)	(0.98)
Closely_held	-1.08	-0.32	-1.43	-1.95
	(-1.08)	(-0.32)	(-0.51)	(-0.72)
B_ind*Closely_held	11.08**	5.03	8.9	15.83
	(2.50)	(1.18)	(0.79)	(1.50)
Constant	-5.83**	0.05	55.98	3.57
	(-2.42)	(0.02)	(4.34)	(0.42)
Tobin's Q (t-2)			-0.05	0.13
			(-1.08)	(3.34)
Industry Dummy	Included	Included	Included	Included
Year Dummy	Included	Included	Included	Included
R-Squared	0.1517			
F Value	4.71			
P Value	0.0000			
Wald chi2		62.24	205.71	552.73
Prob > chi2		0.0001	0.0000	0.0000
AR (1) test (*p-value*)			0.28	0.26
AR (2) test (*p-value*)			0.38	0.36
Observations	684	684	290	395

Notes: This table reports results of regressions of the relationship between firm performance and board independence. The moderation effect of ownership concentration. The regression coefficients are reported with the associated t-values (or z-values) in parenthesis.
The significance level is described as follow: * significant at the 0.10 level; ** significant at the 0.05 level; * ** significant at the 0.01 level.

Table 6.5: Estimation of the Relationship Between Board Independence and Firm Performance-The Moderation Impact of Ownership Concentration

Column 1, Table 6.5 presents the estimation results of the moderation impact of ownership concentration on the board independence-performance relationship, when the

performance measure is Tobin's Q and the estimator is OLS. The table reveals that the coefficient on the interaction term between B_ind and Closely-held is positive and significant (i.e. $t = 2.50$, $p < 0.05$). This implies that the relationship between board independence and Tobin's Q is moderated by ownership concentration. In contrast, the coefficient on B_ind (which measures the impact of board independence on performance for widely-held firms) is statistically insignificant. These results suggest that the performance impact of board independence is stronger for closely-held firms than for widely-held firms. The results further suggest that the positive relationship between board independence and Tobin's Q (Column 1, of Table 6.2) is derived from closely-held firms. The results underscore the important role that independent directors can play in the corporate governance of closely-held firms, and they provide support for hypothesis 1c. Other results using the GLS, GMM-Difference and GMM-System estimators respectively as shown in Table 6.5 reveal no significant relationship between board independence and firm performance when the moderation effect of ownership concentration is taken into consideration.

Table 6.6 presents the estimation results of the moderation effect of ownership concentration on the relationship between board independence and firm performance, when ROA is the measure of performance and using the Dynamic Panel Data estimators. Column 1, Table 6.6 reveals that the coefficient on the interaction term between B_ind and Closely-held using the GMM-Diff technique is negative and significant (i.e. $t = -3.73$, $p < 0.00$). This suggests that the positive relationship between board independence and ROA as shown in Column 3, Table 6.3 is moderated by ownership concentration. In contrast, in Table 6.6 the coefficient on B_ind (which measures the impact of board independence on performance for widely-held firms) is positive and significant (i.e. $t = 3.78$, $p < 0.00$). These results suggest that the relationship between board independence and ROA (Column 3 of Table 6.3) which was earlier found to be positive is derived however from the widely-held firms.

Table 6.6

Estimations of the Relationship Between Board Independence and Firm Performance: The Moderation Effect of Ownership Concentration

Dependent Variable: ROA	Arellano-Bond	Arellano-Bover/Blundell-Bond
Variable	**GMM-Diff**	**GMM-System**
B_ind	0.78***	17.36***
	(3.78)	(8.99)
CEO_Tenure	0.00	0.44***
	(-0.46)	(4.40)
Firm Size	0.01	0.39***
	(0.81)	(3.74)
Leverage	0.02	-2.62***
	(0.47)	(-6.62)
Board Size	-0.05	-0.53
	(-1.16)	(-1.31)
Investment	0.15**	1.69**
	(2.58)	(2.59)
Growth Opportunity	0.01	0.1
	(0.30)	(0.5)
CEO_Duality	0.01	0.14
	(0.22)	(0.29)
Closely_held	0.16***	4.54***
	(3.35)	(9.23)
B_ind*Closely_held	-0.78***	-18.70***
	(-3.73)	(-9.30)
Constant	-0.16	-9.73***
	(-0.57)	(-5.72)
ROA (t-2)	-0.09	-1.96
	(-1.55)	(-3.91)
Industry Dummy	Included	Included
Year Dummy	Included	Included
R-Squared		
F Value		
P Value		
Wald chi2	80.45	556
Prob > chi2	0.00	0.00
AR (1) test (*p-value*)	0.01	0.30
AR (2) test (*p-value*)	0.68	0.36
Observations	281	384

Notes: This table reports results of regressions of the relationship between firm performance and board independence. The moderation effect of ownership concentration. The regression

coefficients are reported with the associated t-values (or z-values) in parenthesis.
The significance level is described as follow: * significant at the 0.10 level; ** significant at the 0.05 level; *** significant at the 0.01 level.

Table 6.6: Estimation of the Relationship Between Board Independence and Firm Performance -The Moderation Impact of Ownership Concentration

In a similar manner, the result presented in column 2, Table 6.6 reveals that the coefficient on the interaction term between B_ind and Closely-held using the GMM-System estimator is negative and significant (i.e. $t = -9.30$, $p < 0.00$). This suggests that the positive relationship between board independence and ROA as shown earlier in Column 4, Table 6.3 is moderated by ownership concentration. In contrast, the coefficient on B_ind (which measures the impact of board independence on performance for widely-held firms) is however positive and significant (i.e. $t = 8.99$, $p < 0.00$). These results suggest that the relationship between board independence and ROA (Column 4 of Table 6.3) which had earlier been found to be positive is, however, derived from the widely-held firms.

6.4. Discussion of findings and implications

Using a sample of publicly listed firms in Nigeria over the period 2004-2015, this study provides several interesting findings. The study finds that the presence of independent directors on the corporate board does have a positively significant association with firm performance. One possible interpretation is that the presence of independent directors on the board has a positive impact on performance; as the proportion of independent directors on the board increases, the firm value rises. This suggests that Nigerian publicly listed firms could enhance their performance by increasing the proportion of independent directors on their boards. This result provides support for hypothesis 1a. The result is consistent with findings in some prior studies on board independence and firm financial performance. For example, Satia-Atmaja (2009) examines the impact of

governance mechanisms on firm value using panel data on a sample of Australian publicly listed firms over a period of 6 years, and provides empirical findings that board independence enhances firm value. Liu et al. (2015) examine board independence and firm performance on a sample of publicly-listed Chinese firms over a twelve-year period. They provide evidence that the presence of independent directors on the board has a positive impact on firms' operating performance. The result is also consistent with findings of several other emerging market based studies as reviewed in section 4.3.2 (e.g Cho and Kim, 2007; El Mehdi, 2007; Lefort and Urzua, 2008; Jacking and Johl, 2009; Liu et al., 2015; Chen, 2015). Furthermore, the finding is as well consistent with some prior African based corporate governance studies on board independence and firm performance, as reviewed in section 4.3.3 (e.g. Kyereboah-Coleman, 2007; Ntim, 2012). The finding is also consistent with the suggestion of the theoretical literature. For example, the agency theory suggests that the representation of the independent directors on the board enhances the effectiveness of the board in monitoring the executive management and exercising control on behalf of the shareholders (Jensen and Meckling, 1976; Fama & Jensen, 1993).

Regarding the investigation of the relationship between board independence and ownership concentration, the study finds an insignificantly negative impact of ownership concentration on board independence. The study fails to find evidence that ownership concentration has any significant impact on board independence. A possible interpretation of the finding is that, given the direction of the result, the controlling shareholders prefer less independent boards, and by so doing would be able to act at their own discretion. This finding appears to provide support for the rent extraction argument (Satia-Atmaja, 2009). The second possible interpretation is that the presence of blockholders with more incentives and power to monitor the management may substitute for the monitoring role of independent directors on the board. Although it makes more economic sense to seek increased independence for the board. The result, nevertheless does not provide support for hypothesis 1b, as the relationship not statistically significant. The reason

for the statistically insignificant result may be due to peculiarities of the Nigerian institutional environment as explained in sections 2.2 to 2.4 as the firm's institutional environment shapes corporate governance practices and their performance outcomes. This result is also not consistent with prior studies that investigate the relationship between ownership concentration and board independence. For example, Anderson and Reeb (2004) document that family blockholders in large US firms prefer to limit independent directors' presence on the board. The result also not consistent with Kim, Kitssabunnarat-Chatjuthamard, and Nofsinger (2007) who report that ownership concentration is negatively associated with board independence and not consistent with Satia-Atmaja (2009) who finds a negative relationship between ownership concentration and board independence.

The study finds that the positive impact of board independence on firm value (Tobin's Q) is moderated by ownership concentration, and that the performance impact of board independence is stronger in closely-held than widely-held firms when the measure of performance is Tobin's Q, suggesting that the positive relationship between board independence and firm value is derived from closely-held firms. The result provides support for hypothesis 1c and is consistent with the findings of prior studies. For example, Satia-Atmaja (2009) who examines governance mechanisms and firm value of the Australian listed firms reports a positive relationship between board independence and Tobin's Q, and that this relationship is moderated by the ownership concentration. In contrast, this study finds that, the performance impact of board independence is however stronger in widely-held than closely-held firms when ROA is used as the performance measure.

Some of the implications of these results are discussed as follows:

These results have implications for theory. The root of the agency problem in firms can be traced to a separation between ownership and control (Bearle and Means, 1932). Because of

this phenomenon, the interests of the manager and owner may diverge and the board of directors is the mechanism for aligning the interests of both parties, through monitoring and ratifying the manager's decisions (Jensen and Meckling, 1976). A major conflict also exists between the CEO and directors (Hermalin and Weisbach (2003). For example, on one hand, the CEO has an incentive to bring the majority of the directors under his control, and by so doing, he ensures that he keeps his job and increases the benefits derivable from being the CEO, on the other hand, the directors have incentives to monitor the CEO and replace him if he underperforms. The agency role of the directors is basically monitoring (Jensen and Meckling, 1976; Johnson, Daily and Ellstrand, 1996) and independent directors are generally considered better monitors (Satia-Atmaja, 2009). Findings in this empirical study reveal a positive relationship between board independence and performance, suggesting that an independent board enhances firm performance; therefore, the greater the proportion of independent directors on the corporate board, the better the firm's performance. The agency theory suggests that effective monitoring by the directors would improve the firm's financial performance. This finding therefore is consistent with the agency theory suggestion (Jensen and Meckling, 1976).

The findings also have implications for policy makers. The operations of Nigerian listed firms are regulated by many governmental agencies but the notable ones in the Nigerian context include The Corporate Affairs Commission (CAC), The Nigerian Stock Exchange (NSE) and The Nigerian Security and Exchange Commission (SEC). One of the major findings in this study is that the presence of independent directors on corporate boards enhances firm performance. This finding justifies the initiatives that is being made by policy makers to encourage more independent directors on boards. In the recent past, regulators have begun to emphasize the need to have more non-executive directors on firm boards (Mura, 2007). Instances from developed economies include the recommendation in the UK by the Higgs Report (2003) that boards be composed of an independent non-executive director majority. In the US, the NYSE and NASDAQ respectively

have adopted similar requirements (Holmstrom and Kaplan, 2003). The Nigerian Security and Exchange Commission could also adopt a similar requirement[22].

The results have implications for corporate decision makers. The findings imply that the controlling shareholders should be aware of the need to have more independent directors on the board. The general opinion in the literature is that independent directors are better monitors of the managers and the investors consider them as an effective governance mechanism to control the agency problems between controlling and minority shareholders (Mura, 2007).

The results have implication for implications for the investors. The equity shareholders are the residual claimant among all the stakeholders in the firm. As mentioned in section 1.1, the main aim of the providers of funds is to get an adequate return on their investments. They may have very little or even nothing to claim if the company performs so poorly and was eventually wound up. Although the investment motives vary among the investors, most investors would seek an increase in their wealth. The findings in this empirical study suggest that the firm value and thus shareholders' wealth could be enhanced by increasing the proportion of independent directors on the board. The results imply that, as far as agency costs are concerned, investing in firms that have more independent directors would be more rewarding for the investors.

Regarding the academic implications of the results, the finding that performance impact of governance mechanisms is moderated by ownership structure underlines the important governance role that independent boards can play in an economy with a high level of private benefit of control and ownership concentration.

[22] The Nigerian corporate governance code requires every company to have at least one independent non-executive director on the board.

Findings also show that, the independent directors can also play a significant role in the governance of closely-held firms. This has implications for policy makers.

6.5. Robustness Checks

Some additional checks were conducted to test the robustness of the results. First, to test whether the results in Table 6.4 are sensitive to alternate measurements, the model for estimating the relationship between board independence and ownership concentration is re-estimated by using an alternate proxy for ownership concentration. More specifically, the proportion of issued equity shares of 20 per cent and above is used to proxy for ownership concentration instead of using a dichotomous (dummy) variable. The results (see Table 1.0 in the Appendix) are not substantially different from those reported in Table 6.4. Second, to confirm the validity of the moment conditions used in the dynamic panel-data models of Arellano-Bond and Arellano-Bover/Blundell-Bond, the study performs tests for AR (1) and AR (2) for first-order and second-order serial correlation in the first-differenced residuals, under the null hypothesis of no serial correlation in the first-differenced errors. The tests show that, the moment conditions used by xtabond and xtdpd are valid and that the models estimated in the study are not misspecified.

6.6. Summary

In this chapter, the study examines the corporate governance role of independent directors on the corporate boards of Nigerian listed firms. The study estimates the relationship between board independence and firm financial performance, and it takes into consideration the moderation effect of the firm's ownership structure. The approach, using more than one estimation technique, provides the benefit of checking robustness of the results and gives the opportunity to see whether there are significant relationships given the underlying assumptions of each of these estimation techniques.

CHAPTER SEVEN: OWNERSHIP STRUCTURE AND FIRM PERFORMANCE

7.1. Introduction

The monitoring and control role of the board is fundamental to corporate governance from the agency theory perspective (Jensen and Meckling, 1976). The agency conflict between the manager and owner arises consequent to a separation of ownership and control. This is the common agency problem in the firms operating in Anglo-Saxon jurisdictions such as the US and UK where dispersed ownership is the norm (La Porta, Lopez-De-Silanes & Shleifer, 1999). One major weakness of dispersed ownership is that dispersed owners are both unwilling and unable to act as effective monitors of publicly listed firms (Heugens, Essen and Oosterhout, 2009). Hence, the role of the board to monitor and discipline managers becomes necessary.

In most developing and emerging economies, and including Nigeria, ownership concentration is the norm (La Porta, Lopez-De-Silanes & Shleifer, 1999). This is partly because the markets for corporate control, equity capital market and executive talents have not been fully developed as the primary forces to keep managers in check, in contrast to developed economies (Gillan, 2006). Therefore, in developing economies the investors themselves need to be largely involved in direct monitoring of the managers, as they have little or no choice other than to accept their role as monitors; but to effectively carry out this role, the investors need to concentrate their equity holdings (Heugens, Essen and Oosterhout, 2009). The resulting ownership structure inevitably generates another type of agency problem in the firm (i.e., a conflict of interest between the large investors and minority investors).

In line with agency theory (Jensen and Merckling 1976), several studies argue that the interests of both the owner and manager can be aligned through the managerial equity ownership. Morck, Shleifer and Vishny (1988) and later Monks and Minow (2004), for example, contend that

the directors' equity ownership is an important incentive for directors to monitor management. However, a more widely debated issue is whether there is a causal relationship between performance and firm ownership structure.

In this chapter, the researcher seeks to investigate four major questions about the firm ownership structure. First, the study will examine what impact does the executive directors' ownership has on the performance of Nigerian listed firms? Second, the study will consider what impact does the non-executive directors' ownership has on firm performance? Third, it will examine whether the institutional investors are active monitors of the management and whether their equity ownership has an influence on firm value. Fourth, the study will investigate what impact does the ownership by non-institutional blockholders has on the performance of Nigerian listed firms?

7.2. Descriptive Statistics

The descriptive statistics for variables in this chapter are presented in Table 7.1 below. The statistics summary in the table reveals that the executive directors hold an average of 7 per cent of the firms' issued shares, while non-executive directors own an average of 12 per cent. The institutional investors hold an average of 39 per cent while non-institutional blockholders in the position of 3 per cent and above (i.e., at a lower level of ownership concentration) hold an average of 13 per cent of the outstanding issued shares. The statistics shows that in 66 per cent of the firm years, the firm's ownership is concentrated (i.e. at a higher level of ownership concentration). These statistics in all point to the fact that an average Nigerian firm is concentrated and this has an implication for shaping corporate governance in the firm.

Table 12, in the Appendix, reports the Pearson's correlation coefficient among variables used in the analysis of ownership structure and firm performance. The correlation table shows

there are positive and significant correlations among the variables used in this analysis. The table shows no sign of multicollinearity as the maximum correlation magnitude is about 53 per cent. The variable inflation factor is also calculated. The VIF values for individual variable remains below 5.0 and the mean is also below threshold of 10. The overall results suggest that multicollinearity is not a potential problem in the multiple regressions carried out in this study.

The overall results suggest that multicollinearity is not a likely threat in the analysis.

TABLE 7.1

Descriptive Statistics

Variable	Observation	Mean	Std.Dev	Min	Max
Performance					
ROA	910	0.007	1.843	-53.70	0.956
Tobin's Q	931	1.727	4.90	0.007	8.77
Ownership Structure					
Executive Dire. Ownership (%)	952	0.07	0.15	0.00	0.80
Non-executive Ownership (%)	937	0.12	0.19	0.00	1.00
Institutional Ownership (%)	928	0.39	0.26	0.00	0.81
Non-institutional Ownership	932	0.13	0.23	0.00	0.91
Closely-held	987	0.66	0.48	0.00	1.00
Control Variables					
Firm Size (Natural Logarithm)	949	8.84	1.79	2.72	13.92
Investments	955	0.09	0.10	0.00	1.26
Dividend	596	0.06	0.17	0.00	3.05
Leverage	973	0.23	0.22	0.00	1.18
Cash flow	970	0.14	0.91	-1.22	28.00
Tangible Assets/Sales Ratio	879	1.01	4.62	0.00	94.81

Table 7.1: Descriptive Statistics

7.3. The Results

7.3.1. Executive Directors' Ownership

Table 7.2 presents the regression results of the relationship between firm performance and executive management ownership. The measures of performance used in the analysis are *Tobin's Q* and *ROA*. The definitions of both Tobin's Q and ROA are provided in section 5.5.1. In the study, the *Executive Management directors* is defined as the proportion of firm-issued equity shares that are owned by the executive management. *Leverage* is the ratio of total debt to total assets. *Investment* is the ratio of capital expenditure to total assets. *Firm Size* is the natural logarithm of total assets. *Growth Opportunity* is the average growth in sales revenue in the previous year.

Table 7.2
Estimation of the Relationship Between Ownership Structure and Firm Performance

Dependent Variable: Tobin's Q	**Ord. Least Squares**	**Random Effect**	**Arellano - Bond**	**Arellano - Bover/Blundell-Bond**
Variable	**(OLS)**	**GLS**	**GMM-Diff**	**GMM-System**
Executive Directors' Ownership	-2.77	-0.48	-0.78	2.35
	(-1.13)	(-0.22)	(-0.25)	(0.41)
Non-executive Ownership	-2.77	-1.12	-6.73***	-10.97***
	(-1.44)	(-0.69)	(-2.99)	(-2.76)
Institutional Own	0.51	-0.81	-13.05***	-4.93
	(0.32)	(-0.50)	(-4.95)	(-1.24)
Non Institutional Ownership	-3.06*	-0.90	-4.86**	-2.23
	(-1.67)	(-0.54)	(-2.24)	(-0.53)
Firm Size	-0.43**	-0.23	0.25	-0.54
	(-2.05)	(-0.74)	(0.29)	(-1.32)
Leverage	2.24	-0.31	-1.19	-2.05
	(1.41)	(-0.23)	(-0.93)	(-0.87)
Dividend	2.11	1.34	2.34	-0.05
	(0.67)	(0.53)	(1.32)	(-0.02)
Investments	0.19	-0.22	-2.83	-0.90

	(0.05)	(-0.08)	(-1.17)	(-0.19)
Cash Flow	-0.04	0.01	2.88	-0.39
	(-0.19)	(0.08)	(1.27)	(-0.26)
Growth Opportunity	-0.00	0.00	0.00	-0.00
	(-0.18)	(0.02)	(1.22)	(-0.22)
Tangible Assets/Sales Ratio	-0.39	-0.11	-0.33	0.04
	(-1.02)	(-0.36)	(-0.13)	(0.07)
Tobin's Q (t-1)			-0.09*	0.63***
			(-1.77)	(14.18)
Constant	6.22***	4.38	7.14	7.20*
	(2.82)	(1.47)	(0.87)	(1.67)
Industry Dummy	Included	Included	Included	Included
Year Dummy	Included	Included	Included	Included
R-Square	0.0583	0.0307		
F Value	1.16			
P Value	0.28			
Wald chi 2		21.26	71.75	269.78
Prob > chi2		0.44	0.00	0.00
AR (1) test (*p-value*)			0.09	0.22
AR (2) test (*p-value*)			0.18	0.21
Observations	417	417	225	339

Notes: This table reports the result of regression of the relationship between firm performance and ownership structure. The regression coefficients are reported with the associated t-values (or z-values) in parenthesis. The significance level is described as follows: * significant at the 0.10 level; ** significant at the 0.05 level; *** significant at the 0.01 level.

Table 7.2: Estimation of the Relationship Between Ownership Structure and Firm Performance

The Tangible Assets/Sales Ratio is tangible assets divided by sales revenue. Cash Flow is the ratio of pre-tax profit plus depreciation to total assets. Operating Profit/Sales Ratio is profit before tax and interest to sales.

In examining empirically whether executive management ownership impacts firm valuation, the study performs estimations of the relationship between ownership and performance using different estimation techniques. *Tobin's Q* is the measure of market performance and *ROA* is the measure of accounting performance. The main explanatory variable is the *Executive Management*

Ownership. The study includes the *non-executive ownership, institutional ownership,* and *non-institutional ownership* to control for the possible effects they may have on firm performance. Other control variables included in the model are: *leverage, firm size, dividend, investments, growth opportunities, tangible assets/sales ratio,* and *cash flow*. The regression model also includes the *industry* and *years dummies* to control for the impact that industries in which firms belong may have on their performance, as well as controlling for the years' effects on the estimation.

Row 1, Column 1 in Table 7.3 shows the result of the OLS estimation of the relationship between executive directors' ownership and firm accounting performance. The result shows that there is a negative and significant relationship between the executive management ownership and firm accounting performance (i.e. $t = -0.06$, $p < 0.10$). The result suggests that equity shares ownership by the executive directors does not enhance the firm's accounting performance. Thus, it implies that the firm's market performance declines as the executive directors' equity shares ownership increases. This signals the entrenchment effect, as the summary statistics (Table 6.1) also indicates that, average tenure of the CEO is long (i.e., about 5 years). Therefore, increasing the executive director's equity shares ownership might make them more entrenched and invariably enhance their private benefits of control. The result does not provide support for hypothesis 4. Following a similar direction, the OLS estimation result in row 1, column 1, Table 7.2, using the market performance measure, shows a negative but insignificant relationship between the two variables. The result suggests that, the executive director' ownership does not improve firm's value.

Table 7.3
Estimation of the Relationship Between Ownership Structure and Firm Performance

Dependent Variable: ROA	Ord. Least Squares	Random Effect	Arellano - Bond	Arellano - Bover/Blundell-Bond
Variable	(OLS)	GLS	GMM-Diff	GMM-System
Executive Directors 'Ownership	-0.06*	-0.06	-0.01	-0.04
	(-1.88)	(-1.58)	(-0.12)	(-0.55)
Non-executive Ownership	-0.03	0.01	0.12**	0.09**
	(-1.00)	(0.42)	(2.47)	(2.46)
Institutional Own	-0.01	-0.01	-0.01	-0.07*
	(-0.68)	(-0.28)	(-0.17)	(-1.72)
Non-Institutional Ownership	-0.06**	-0.04	-0.11**	-0.09**
	(-2.35)	(-1.52)	(-2.38_	(-2.49)
Firm Size	0.01***	0.01***	-0.03	0.01
	(3.95)	(2.68)	(-1.54)	(2.95)
Leverage	-0.8***	-0.06**	0.00	-0.05**
	(-3.80)	(-2.56)	(0.07)	(-2.14)
Dividend	0.16***	0.11**	0.06	0.02
	(3.61)	(2.48)	(1.47)	(0.65)
Investments	0.19***	0.14***	0.01	0.00
	(3.46)	(2.61)	(0.12)	(0.01)
Cash Flow	0.00	0.00	0.11**	0.02
	(0.77)	(0.95)	(2.10)	(1.50)
Growth Opportunity	-0.00	-0.00	-0.00	-0.00
	(-0.59)	(-0.49)	(-1.24)	(-0.86)
Tangible Assets/Sales Ratio	-0.01**	-0.01	0.00	0.01
	(-2.25)	(-1.56)	(0.29)	(0.94)
ROA (t-1)			0.35***	0.37***
			(6.37)	(10.21)
Constant	0.04	0.04	0.28	-0.04
	(1.34)	(1.01)	(1.50)	(-0.93)
Industry Dummy	Included	Included	Included	Included
Year Dummy	Included	Included	Included	Included
R-Square	0.2158	0.207		
F Value	5.15			
P Value				
Wald chi 2		57.81	116.83	212.08
Prob > chi2		0.00	0.00	0.00
AR (1) test (*p-value*)			0.04	0.07
AR (2) test (*p-value*)			0.88	0.55

Observations	415	415	218	331

Notes: This table reports the result of regression of the relationship between firm performance and ownership structure. The regression coefficients are reported with the associated t-values (or z-values) in parenthesis. The significance level is described as follows: * significant at the 0.10 level; ** significant at the 0.05 level; *** significant at the 0.01 level.

Table 7.3: Estimation of the Relationship Between Ownership Structure and Firm Performance

As discussed earlier in section 5.6, the dynamic panel-data estimation models better address the endogeneity and fixed effects heterogeneity issues associated with most econometric analysis (Mileva, 2007). The study uses both the Differenced-GMM and System-GMM in the estimation of the executive director ownership-performance relationship. The study runs the xtabond command in STATA for the GMM-Difference estimations. The dependent variable (i.e. Tobin's Q or ROA) is lagged back from period t-1 with 2 lags maximum. All Ownership variables are included in the model as endogenous variables and lagged back from period t-1 with 2 lags maximum**.** Firm size is included in the model as a pre-determined variable. Industry and years dummies are included as exogenous variables. All other variables included as control variables are used as instruments for the difference equation. The variables that collinear with one another are excluded from the regression model.

Row 1, Column 3, Table 7.3 presents the estimation result of the relationship between executive directors' ownership and accounting performance using Differenced GMM. The result indicates a negative but insignificant relationship between the executive management equity ownership and firm accounting performance. Similarly, the result presented in Row 1, Column 3, Table 7.2 shows a negative but insignificant relationship between the executive directors' ownership and firm value. The results indicate that equity shares ownership has no impact on the performance of firms.

As mentioned earlier in section 6.3.1 above, the System GMM is an improved dynamic panel-data estimator over the differenced GMM. Because it provides increased efficiency (Mileva, 2007), the study uses the technique for the estimation of the executive directors' ownership-performance relationship. Row 1, Column 4 in Tables 7.2 and 7.3 present the results of the System GMM estimations; the results reveal an insignificant relationship between the executive management ownership and firm accounting and market performance. None of the results using the System GMM estimator provide support for hypothesis 2.

The results of the estimation of the relationship between the executive directors' ownership and firm performance using the GLS (RE), GMM difference and GMM system estimators respectively however, all indicate negative but insignificant association between the two variables, as revealed in row 1, columns 2 to 4, Table 7.3 and row 1, columns 2 and 3, Table 7.2. Besides, the estimation result using the GMM-System estimator when the performance measure is Tobin's Q, although produces an insignificant but positive relationship. All insignificant results, like that obtained from Row 1, Column 1, Table 7.2 using the OLS estimator, further suggest that the executive ownership has no impact on firm performance.

7.3.2. Non-Executive Directors Ownership

In this section, the relationship between Non-Executive Directors ownership and firm performance is examined. The measures of performance used are *Tobin's Q* and *ROA* respectively. *Non-executive ownership* is the main explanatory variable. It is defined as the proportion of the firms' issued shares that are held by non-executive directors. The study includes in the model *executive directors' ownership, institutional ownership* and *non-institutional ownership* to control for the effects that these ownership types may have on the estimation. The study also controls for ownership characteristics such as *leverage, firm size, dividend, investments, growth opportunities,*

tangible assets to sales ratio, and *cashflow*. The *industry* and *years dummies* are also included in the regression model to control for the impact that industries in which sampled firms belong and the years may have on the estimation. The description of these variables remains the same as in section 5.5.1.

Row 3, Column 1 in Table 7.2 presents the result of the OLS estimation of the relationship between non-executive directors' ownership and performance, when Tobin's Q estimator is used as a measure of performance. The result reveals a negatively insignificant association between the non-executive ownership on firm performance. Row 3, Column 2, Table 7.2 presents an estimation result that is also not statistically significant using the Random Effect GLS technique when the market measure of performance is used. Row 3, Column 3, Table 7.2 shows the estimation result using the GMM-Difference estimator. Unlike those of OLS and RE GLS estimators, the result reveals a significant negative relationship between non-executive directors' ownership and Tobin's Q. (i.e., $z = -6.73$, $p < 0.00$). The result presented in Row 3, column 4, Table 7.2 in a similar manner has a negative association and takes similar direction; it shows that using the GMM-System estimator when the performance measure is Tobin's Q, then the coefficient on *Non-Executive Ownership* is also negative and significant at the conventional level (i.e., $z = -10.97$, $p < 0.00$); suggesting that equity shares ownership is not an effective incentive for the outside directors' improved effectiveness in performing their monitoring role.

Table 7.3 presents the estimation results of the relationship between non-executive directors' ownership and firm performance when the measure of performance is *ROA*. Both the GMM-Difference and GMM-Systems estimators produce results that indicate a positive and significant association between Non-executive directors' ownership and accounting performance (i.e. with GMM-Difference, $z = 0.12$, $p < 0.05$ and using GMM-System, $z = 0.09$, $p < 0.05$) however, all other results using the OLS and GLS estimators indicate a statistically insignificant

relationship between non-executive directors' ownership and the accounting measure of firm performance. The latter results suggest that non-executive equity ownership has no impact on firm performance.

7.3.3. Institutional Investors' Ownership and Firm Performance

The study investigates the relationship between institutional ownership and firm performance. *Tobin's Q* is used as a measure of market performance and *ROA* is the measure of accounting performance. *Institutional Ownership* is the main explanatory variable while controlling for *Executive Directors' Ownership, Non-executive Ownership,* and *Non-institutional Ownership* because of the influence they may have on the estimation. Other control variables included in the model are *leverage, firm size, dividend, investments, growth opportunities, tangible assets to sales ratio,* and *cashflow*. The regression models also include the *industry* and *years dummies* to control for the impact that industries in which those sampled firms belong may have on their performance and as well controlling for the effects of years on the estimation. *Institutional Ownership* is defined as the proportion of issued shares held by investors (in the position of 3 per cent and above) such as banks, pension and hedge funds, insurance companies, mutual funds and other corporate institutional investors. This type of equity ownership is different from other ownership types included in the regression model as control variables.

Row 5, Column 1 in Table 7.2 presents the result of the OLS estimation of the relationship between institutional investors ownership and Tobin's Q. The result shows that there is a positively insignificant association between the *Institutional Ownership* and *Tobin's Q*. Similarly, in Row 5, Column 2, Table 7.2, using the Random Effect GLS estimator, while Tobin's Q remains the measure of performance, the result reveals a negative and insignificant relationship between the *Institutional Ownership* and *Tobin's Q*, suggesting that there is no relationship between institutional ownership and firm market performance.

Given the greater effectiveness of the dynamic panel-data estimators in addressing econometric issues on the governance-performance relationship such as the endogeneity and unobservable fixed effects in the error term, which may correlate with the explanatory variables (Mileva, 2007, Liu *et al.*, 2015), the research uses the GMM-Difference and GMM-System estimators. The estimation procedure used is that the dependent variable (i.e. *Tobin's Q* or *ROA*) is lagged (t-1) with 2 lags maximum. Other *ownership variables* are included as endogenous variables and lagged for (t-1) period with 2 lags maximum. The *firm size* is included as a pre-determined variable. *Industry* and the *years' dummies* are included as exogenous variables, while other variables in the model are included as exogenous variables and used as instruments for the difference equation. All the variables that collinear with one another are excluded from the regression model. The result presented in Row 5, Column 3, Table 7.2 using the GMM-Difference estimator reveals a negative and significant association between institutional ownership and Tobin's Q (i.e. $z = -13.05$, $p < 0.00$), implying that institutional ownership does not improve firm value. This may suggest that the institutional blockholders are passive shareholders who leave the firm's control largely in the hands of the managers. However, the result presented in Row 5, Column 4, Table 7.2 using the GMM-System reveals a negative but insignificant relationship between institutional investor ownership and firm value. Table 7.3. presents the estimation results of the relationship between institutional ownership and accounting performance measures. All the estimation results as presented in Table 7.3 using the OLS, RE GLS, and GMM-Diff estimators respectively reveal an insignificant association between institutional ownership and firm accounting performance, suggesting that there is no relationship between institutional ownership and performance when ROA is the measure of performance. However, the result using the GMM-System produces a negative and significant relations between the institutional ownership and firm accounting performance (i.e. $z = -0.07$, $p < 0.10$). This result is consistent with the result from Table 7.2 using the GMM-Difference estimator.

7.3.4. Non-Institutional Investors' Ownership-Performance Relationship

To determine the nature of the relationship between the non-institutional ownership and firm performance, the study also uses a variety of techniques to carry out estimations. *Tobin's Q* is the measure of market performance and *ROA* is the measure of accounting performance. The description of all the variables used remain the same as provided in section 5.5.9. above. The main explanatory variable is *Non-Institutional Ownership*. This is defined as the proportion of issued equity shares held by outside bulkholders (in the position of 3 per cent and above) who are not institutional investors (i.e. non-financial institutions).

The estimation approach used for this investigation in the study involves, the inclusion in the regression model, other ownership types such as the *executive directors' ownership, non-executive directors' ownership* and *institutional ownership* to control for their effects on the estimation. Other control variables used in the model include *leverage, firm size, dividend, investments, growth opportunities, tangible assets/sales Ratio,* and *cash flow.* The regression models also include the *industry* and *years dummies* to control for the impact of industries on firm performance as well as controlling for the years' effects on the estimation.

The study also uses the dynamic panel data estimators in the estimation of the relationship between non-institutional ownership and firm performance. As discussed in earlier sections, the dynamic panel-data estimators better address the issues relating to endogeneity, unobserved fixed effects in error term (Mileva, 2007; Liu *et al*., 2015). The procedure used for dynamic panel data estimations is that the dependent variable (i.e. Tobin's Q or ROA) is lagged (t-1) with 2 lags maximum. All the ownership variables are included in the model as endogenous variable and lagged for (t-1) period with 2 lags maximum. The *firm size* is included as a pre-determined variable. *Industry* and *years dummies* are included as exogenous variables. All other variables such as *leverage, dividend, investments, cashflow, growth opportunities,* and *tangible assets/sales ratio*

are included as exogenous variables and used as instruments for the difference equation. All variables that collinear with one another are excluded from the regression model.

Row 7, Column 1, and column 3, in Table 7.2 present each of the results of the OLS and GMM-Difference estimation regarding the relationship between non-institutional ownership and firm market performance. The results reveal a negative and significant relationship between non-institutional ownership and Tobin's Q (i.e. using the OLS estimator, $t = -3.06$, $p < 0.10$ and using the GMM-Difference, $z = -4.86$, $p < 0.05$) . However, the results presented in Row 7, Columns 2 and 4 Table 7.2 using the RE GLS and GMM-System estimators reveal negatively insignificant association between non-institutional ownership and the firm accounting measure of performance. This suggests that this ownership type has no impact on firm performance. Like earlier results indicating a significantly negative association between the firm accounting performance and non-institutional ownership using the OLS (i.e. $t = -0.06$, $p < 0.05$), GMM-Difference (i.e. $z = -0.11$, $p < 0.05$) and GMM-System (i.e. $z = -0.09$, $p < 0.05$) estimators respectively are those presented in Row 7, Table 7.3. These negative results suggest that non-institutional blockholders are lacking in performing their governance role.

7.4. Discussion of Findings and Implications

7.4.1. Executive Directors' Ownership

In examining the ownership structures of Nigerian listed firms in relation to their performance, the study provides evidence of a negative relationship between executive directors' ownership and firm performance when the accounting performance measure is used but insignificant relationship, using the market measure of performance (Tobin's Q). The empirical evidence of a negative relationship suggests that executive directors 'ownership does not enhance firm performance. This evidence implies that, as the executive directors' ownership increases, so the firm's accounting performance declines. This suggests that the performance of Nigerian firms

may not be enhanced by merely encouraging the executive directors to hold more of the firm's equity shares, without serious consideration for other relevant factors. A possible explanation for this is that, the executives, unlike outside directors, earn significant salaries, bonuses and incentive plans (Murphy, 1985), and may be subject to the disciplinary actions of the managerial labour market (Fama, 1980). Given these reasons, the expectation therefore is that executive directors would be more likely be attached to their jobs than would outsider directors; thus, their equity ownership may not be expected to improve firm performance. However, another explanation can be that the positive impact being expected from such an increase in equity participation by executives may not last for long and may yield negative effects as the executive directors become entrenched (Morck, Shleifer and Vishny, 1988; Heugens, Essen and Oosterhout 2009).

The findings of this study are neither consistent with hypothesis 4 nor with the agency theoretical suggestion as discussed in section 4.6.1 which predicts that, managerial ownership will have alignment effect on firm performance (Jensen and Merckling, 1976). The result of insignificant association between executive directors' ownership and Tobin's Q is however, consistent with finding in some prior studies. For example, Loderer and Martin (1997) examine the relationship between managers' ownership interests and firm performance. Their study finds no evidence that executive stock ownership improves corporate performance. They argue that, higher executive ownership might increase the opportunity for the executive to misappropriate corporate wealth. The result is also consistent with Facio and Lasfer (1999) who examine managerial ownership, board structure and firm value of the UK firms. In their study, they document that, there is no relationship between managerial ownership and firm value (Tobin's Q). Their finding is consistent with some US studies (e.g. Holderness et al., 1999; Bhagat and Black, 1998) but not consistent with earlier US studies (e.g. Hermalin and Weisbach, 1991; McCaonnell and Servaes, 1990 and Morck, Shleifer and Vishny, 1998) which find monotonic relationship between this mechanism and firm value, perhaps due to institutional factors as discussed in section

2.2. None of the findings in this study with respect to the relationship between executive directors' ownership and firm performance is consistent with Mura (2007) who finds a positive relationship between executive ownership and Tobin's Q nor with Morck, Shleifer and Vishny (1988) who examine the relationship between management ownership and firm market valuation on a sample of Fortune 500 US firms and find evidence of a significant monotonic relationship. This finding suggests first, a positive impact and then a negative impact of the management ownership as managers become entrenched.

The findings in the study, have some implications. Their theoretical implication is that, neither the evidence of a negative association between executive directors' ownership and firm performance nor the insignificant relationship between the executive directors' ownership and Tobin's Q is consistent with agency theory. This is because the finding does not support the agency theoretical position which suggests that the interests of both the manager and owner will be aligned if the manager is encouraged to have equity ownership stake in the firm (Jensen and Merckling, 1976). The possible reasons for this inconsistence with the theory might be due to certain factors not considered in the estimation model.

The finding also has implication for corporate managers and the board of directors. As the study provides no evidence of a positive relationship between the executive directors' ownership and firm performance, the board may then employ other types of incentives such as, robust executive compensation packages which include productivity bonuses as this may help align the interests of the executive management with those of the shareholders, and by such means make the executives work towards the firm's value maximization. This will invariably help in resolving the principal-agent problems in the firm.

7.4.2. Non-Executive Directors' Ownership

The study finds a negative and significant relationship between non-executive directors' ownership and Tobin's Q, using the dynamic panel data estimators (i.e. GMM-Difference and GMM-Systems). Although the outside directors have a fiduciary duty to oversee the performance of the executives, monitoring the performance of top executive officers may require a great deal of time and effort (Morck, Shleifer and Vishny, 1988). The finding may possibly be interpreted to suggest that Nigerian outside directors are genuinely independent of the management and thus not influenced by an incentive effect arising from equity ownership to effectively perform their monitoring role. The finding also implies that the firm performance deteriorates as non-executive ownership rises. Given this reason, it may be also possibly explained that, as the non-executive directors' ownership increases and thus rises beyond a certain level, the non-executive directors may become entrenched and hence become counter-productive (e.g., by engaging in minority shareholders' expropriation related activities) and this situation consequently may result to poor monitoring.

The finding that the relationship between non-executive ownership and firm performance is negative suggests that, the non-executive directors' ownership does not enhance firm performance. The implication is that, the finding is not consistent with the agency theory, which predicts an improved performance, given the alignment effect of equity incentives. The finding may suggest that the Nigerian outside directors appear truly independent of the management and therefore not influenced by the alignment effect of equity shares ownership.

The study however, finds a positive and significant relationship between the non-executive directors' ownership and firm accounting measure of performance, using the dynamic panel estimators. In contrast to earlier finding, the result suggests that firm performance can be enhanced by encouraging non-executive directors to hold equity shares in the firm. Unlike the

executive directors, the non-executive directors do not earn salaries and enjoy perquisites as much as the executives, but given a positive impact of equity incentive, the non-executive interests can be aligned with those of the shareholders and this may make them more committed to and effective in performing their monitoring functions. Nevertheless, a caution will still need to be exercised regarding the level of their equity ownership, vis-à-vis its implications for their independence from the management, and ownership and control. The theoretical implication of this result is that the finding is consistent with the agency theory that predicts the alignment of interests and alleviation of agency conflicts in the firm (Jensen and Meckling, 1976). The finding is not consistent with findings of prior studies, such as Mura (2007), who finds a positive and significant relationship between the non-executive directors' representation on the corporate board but not their ownership and Tobi's Q. Mura (2007) finds no relationship between the proportional equity ownership by non-executive directors and Tobin's Q. This finding according to the study, appears to confirm the notion that the outside directors are truly independent of the executives and may not be enticed by equity incentives. Another possible explanation for none or negative relationship between the non-executive directors' ownership and firm performance may that the level of the non-executive directors' equity ownership may be too low to attract their motivation to monitor (Hart, 1995). The result also not consistent with other earlier studies (e.g. Morck, Shleifer and Vishny, 1988; McConnell and Servaes, 1990; Hermalin and Weisbach, 1991) on the relationship between non-executive directors' ownership and Tobin's Q, as such studies find monotonic relationship between these variables especially where equity ownership by non-executive directors is used as proxy for managerial ownership.

7.4.3. Institutional Investors' Ownership

The study finds a negative and significant relationship between institutional ownership and both the firm's accounting and market performance, using the dynamic panel data estimators. The finding suggests that institutional shareholders are passive investors. An inactive approach by institutional investors may provide the management with ample opportunity for self-serving activities which may possibly result in a negative impact on firm value. A lack of active involvement in monitoring could partly be due to the liquidity situation in the stock market. For example, when the value of stock is very high, blockholders including institutional investors would find it more economically attractive to sell stocks rather than to hold and monitor. Although the finding is inconsistent with Pound's (1988) efficient monitoring hypothesis, it is however consistent with both the conflict of interest and strategic alignment hypotheses which predict a negative relationship between institutional ownership and firm value. The finding is also consistent with hypothesis 6 and as well the prior studies (e.g. Jennings, 2005; Seifert, Gonenc, and Wright, 2005) that find a negative association between US institutional investors and firm market performance (Tobin's Q). A similar negative association between institutional blockholders' ownership and Tobin's Q is also reported by some prior studies, e.g. Faccio and Lasfer (2000), who examine the monitoring role of occupational pension funds in the UK. Their findings suggest that occupational pension funds are not effective monitors. Similar results are also reported by Mura (2007) who examines the ownership structure of UK firms in the period 1991-2001 using a hand-collected panel dataset, and providing evidence of a negative relationship between institutional ownership and firm performance. The result however is inconsistent with the generally opinion in the literature that large investors especially the institutional investors have greater incentives to monitor than small investors. In line with this, some researchers argue that since large investors have more to gain from a rise in the stock prices they should therefore be able to bear more easily the costs that arise from the monitoring (Stiglitz, 1985; Shleifer and Vishny,

1977). However, others argue that different investors may have different incentives and costs associated with monitoring (Brickley, Lease and Smith Jr., 1988; Pound, 1988) and therefore may not be equally vigilant (Mura, 2007). The reasons above may therefore be the possible explanations for the inconsistence of the finding with the theory.

The academic implication is that, the finding provides support for both the conflict of interest and strategic alignment hypotheses arguments. It suggests that although institutional investors may be effective monitors however, in most of the time they prefer to move funds around rather than to hold stock and engage in monitoring in the companies in which they invest. The finding also has implication for policy making, as the level of institutional investors' active participation in the management of a company may depend on legal restrictions being put on their stock ownership. For example, a US insurance company may not invest more than 2 per cent of their assets in a single company. The legal or regulatory constraints may hinder the institutional investors' level of ownership and thus that of their involvement in the corporate governance of such investee companies. It is advisable that too stringent regulations that may demotivate the institutional investors must not be imposed on the investors.

7.4.4. Non-institutional Investors' Ownership

Finding in the study reveals a significant and negative relationship between the equity shares' ownership by non-institutional blockholders and performance of Nigerian listed firms. The study provides evidence that non-institutional ownership does not improve firm performance. The common opinion in the literature is that, non-institutional blockholders have the means and incentive to monitor management and where they have controlling interests in the firm, may use their position to obtain information and thus be able carry out effective monitoring however, the finding in this study is to the contrary, as the relationship is significantly negative. This could be because large non-institutional investors may be lagging in their monitoring roles by way of

leaving the control virtually in the hands of the executive and non-executive directors, the approach which may make their ownership not to matter. Some other potential explanations for having a negative relationship, as discussed in the literature could be due to existence of too many monitoring non-institutional blockholders, a factor which may constrain managers in performing their fiduciary duties and making the value maximization decisions (Burkart *et al*., 1997). The negative impact could be because the position (3 per cent and above) of each non-institutional blockholder is too small to motivate active monitoring by these class of investors (Mura, 2007).

The theoretical implication is that, the finding is not consistent with the agency theory which, suggests a positive association between the equity ownership by large outsider investors and firm performance (Jensen and Meckling, 1976). Consequently, there may be the need for further future research to identify and make use of an alternative theory for guiding investigation on the relationship between large non-institutional ownership and firm performance. The implications for the investors, is that they may begin to change their preferences and perhaps opt for other classes of ownership types other than non-institutional bulkholding. In other words, potential investors may therefore need to reconsider other alternative ownership structures aside large ownership when making investment decisions.

7.5. Robustness Checks

Some additional tests were conducted to test the robustness of the results. First, to test whether the results in Tables 7.2 and 7.3 are sensitive to alternate measurements, the models for estimating the relationship between firm performance and ownership structure are re-estimated. The study now does not control for the impacts that other ownership types may have on the regression results. Thus, each ownership model is re-estimated by excluding other ownership types

as control variables in the regression models. The results, as shown in Tables 3 – 10 in the Appendix, are not substantially different from those reported in Tables 7.2 and 7.3

Second, to confirm the validity of the moment conditions used in the dynamic panel-data models of Arellano-Bond and Arellano-Bover/Blundell-Bond, the study performs tests for AR (1) and AR (2) for first-order and second-order serial correlation in the first-differenced residual, under the null hypothesis of no serial correlation in the first-differenced errors. The tests show that the moment conditions used by xtabond and xtdpd are valid and that the model is not misspecified.

7.6. Summary

In this chapter, the study examines the equity ownership roles of the executive directors, non-executive directors, institutional and non-institutional investors in Nigerian listed firms. The study estimates the relationship between each of these ownership types and firms' financial performance, using alternative techniques for the estimations.

CHAPTER EIGHT: GENDER AND ETHNIC MINORITY DIVERSITY AND FIRM PERFORMANCE

8.1. Introduction

The monitoring role performed by directors is an important part of firm-level corporate governance. The effectiveness of the directors in performing this role is a function of many factors, including experience, level of expertise, qualification, ownership, and other directorships held by the directors, among others. The inclusion of women and ethnic minorities in the board composition may enhance firm value if they bring an additional perspective or resource to the board. The issue of gender and ethnic minority diversity has been attracting growing research interest in recent times. The majority of empirical research in this area is based on US data (e.g. Erhardt, Werbel, and Shrader, 2003; Carter *et al*., 2010; Dezso and Ross, 2012), however this study adds to the growing number of non-US research using evidence from Nigeria, an emerging economy where stereotype about female is hitherto highly prevalent and the voices of Nigerian ethnic minorities are rarely heard.

In this chapter, the study investigates two major questions. First, the study investigates whether greater diversity (i.e. the representation and/or presence of Niger-Delta ethnic minority directors and females on the boards of Nigerian listed firms) enhances firm performance; and second, whether female and ethnic minority directors are valued members of the board.

8.2. Descriptive Statistics

A descriptive statistic for all the variables used in the analysis of gender and ethnic minorities in relation to firm performance is presented in Table 8.1 below. The average proportion of women directors on a board is about 11 per cent, while that of ethnic minority directors on a board is 17 per cent. Using the alternative measure of women and ethnic minority representation

on the corporate board, Table 8.1 reveals that the presence of women on the corporate board is about 43 per cent of the firm years, and that of the ethnic minority is about 46 per cent. The frequency of board meetings is about five times in a year on average. The Nigerian corporate governance code stipulates that board meetings should be held at least two times a year (SEC code, 2011). This means that Nigerian listed firms meet and surpasses the minimum number of board meetings required to be met annually by every company listed on the Nigerian Stock Exchange, given the importance of the role that board meetings play in firm level corporate governance. Further to this, findings in the study also show that less than one-third of the firms have women on their boards and less than one-quarter have ethnic minorities on their boards. The study shows that on average firms have just 11 % of their boards comprised of women and similarly, on average, just 17 % of the boards comprised of ethnic minorities.

Table 8.1

Descriptive Statistics

Variables	Observation	Mean	Std.Dev	Min	Max
Performance					
ROA	910	0.007	1.843	-53.70	0.956
Tobin'sQ	931	1.727	4.90	0.007	8.77
Board Diversity					
Women (%)	648	0.11	0.12	0.00	2.22
Dwomen	989	0.43	0.49	0.00	1.00
Ethnic Minority (%)	725	0.17	0.09	0.07	0.75
DEthnic Minority	986	0.46	0.5	0.00	2.00
Control Variables					
Board Size (Number of Directors)	937	2.00	0.30	0.56	2.94
Independent Directors (Percentage)	850	0.19	0.11	0.06	0.78
Firm Size (Natural Logarithm)	949	8.84	1.79	2.72	13.92
Leverage (%)	973	0.23	0.22	0.00	1.18
Investments (%)	955	0.09	0.10	0.00	1.26
Dividend (%)	596	0.06	0.17	0.00	3.05
CEO-Tenure (Years)	988	5.42	4.86	0.00	29.00
Cash flow (%)	970	0.14	0.91	-1.22	28.00
Bmeetings Freq. (Nlog.)	987	4.50	1.41	1.00	13.00

Foreign CEO (%)	853	0.36	0.47	0.00	1.00

Table 8.1: Descriptive Statistics

Table 12 in the Appendix, reports the Pearson's correlation coefficient among variables used in the board diversity-performance regressions. Because of the multicollinearity problem, the control variable on profitability is excluded from the estimations whenever the measure of performance is ROA. The only high correlations in the estimation model are between the Firm and Board Size variables respectively (35%) and between Firm Size and Foreign CEO variables respectively (33%). The variance inflation factors (VIFs) are calculated to complement visual inspection of the correlation table. The VIF values for individual variable remains below 5.0 and the mean is also below threshold of 10. The overall results suggest that multicollinearity is not a potential problem in the multiple regressions carried out in this study.

8.3. The Results

Tables 8.2-8.9 present the regression results of the relationship between board diversity and performance. *Tobin's Q* and *ROA* are used to measure firm performance. The definitions of both the Tobin's Q and ROA are provided in section 5.5.1. The study uses *Women* as a proxy for females representation on the board while the dummy variable (*DWomen*) is a measure for females presence on the board. *Women* is defined as the proportion of the board members that are female. *DWomen* is a binary variable that takes the value of 1 when there is at least one woman on the board and zero otherwise. *Ethnic Minority* is used to proxy for the ethnic minority representation on the board. It is defined as the percentage of ethnic minorities on the board. The *DMinority* is a measure for the ethnic minority presence on the board. It is defined as a binary variable that takes the value of 1 when there is at least one ethnic minority on the board of directors and zero otherwise. *Independent Director* is the proportion of Independent Non-Executive Directors on the

board. *Leverage* is the book value of debts divided by total assets. *Board Meetings Frequency* is the natural logarithm of the number of board meetings held in a year. *Board size* is the natural logarithm of the number of directors on the board. *Investment* is the ratio of capital expenditure to total assets. *Firm Size* is the natural logarithm of firm total assets. *Profitability* is earnings before tax scaled by total assets. *Foreign CEO* is a dummy variable that takes the value of 1 when the CEO is a foreigner and zero otherwise. *Growth Opportunity* is the average growth in sales revenue in the previous year. *CEO Duality* is a dichotomous variable that takes the value of 1 when a single individual holds both the office of the CEO and the Chair of the board.

8.3.1. The representation of Niger-Delta ethnic minority origin directors on corporate board and firm performance.

Tables 8.2 and 8.3 present the results of the estimations of the relationship between the proportion of ethnic minority on the board and firm performance. The main explanatory variable is the proportion of ethnic minority on the corporate board (i.e. *Ethnic Minority)*. The study recognizes that company characteristics may affect both the company's performance and its corporate governance practices. Thus, the study includes variables such as the firm size, Board Size, Leverage Board Meetings Frequency, Investment, Profitability, Foreign CEO, Growth Opportunity, and CEO Duality. Industry and Years dummies are also included in the regression model to control for the effect that industries may have on the estimation and it also includes the year's dummies to control for the years' effects.

Column 1 in Tables 8.2 and 8.3 show the regression estimation results using the OLS estimator. The result in column 1, Table 8.2 (i.e., $t = 2.26$, $p < 0.05$) reveals that the coefficient on Ethnic Minority is positive and significant. This implies that the proportion of ethnic minority people on the board enhances firm value, and that firms can enhance their market value by having

more ethnic minority directors on the board. The result provides support for Hypothesis 2. The other result in the same column also shows that the coefficient of the board size variable is positive and significant (i.e., $t = 4.6$, $p < 0.01$), meaning that there is a positive association between board size and performance. It suggests that firms can improve their market performance by increasing the numbers of directors on their boards. The result with respect to firm size and firm performance shows a negatively significant relationship (i.e. $t = -2.69$, $p < 0.01$), suggesting that additional expansion of the firm size will reduce firm value. Table 8.3 presents the results of the same estimations as that of Table 8.2, but using ROA as the measure of performance. Column 1, Table 8.3, however, shows a positive but not significant relationship between the percentage of ethnic minorities on the board and firm performance, meaning that the proportion of ethnic minority people on the board has no influence on firm performance.

Furthermore, using the accounting measure of performance, none of the explanatory variables in Table 8.3 appear to have a significant relationship with the accounting measure of performance, except leverage. The result in column 1 table 8.3 reveals a negatively significant relationship between leverage and accounting performance. The result (i.e. $t = -3.18$, $p < 0.01$) suggests that debt is not an efficient mechanism for reducing agency conflicts in the firm.

The study also carries out the random effect GLS model estimation of the ethnic minority-firm performance relationship, not only for the benefit of comparing the results but also as a means of performing a robustness check on the results. The GLS random effects regression results are presented in Column 2 of Tables 8.2 and 8.3. Although the results show a positive relationship between the proportion of ethnic minorities on the board and firm market and accounting performance, none of the results are significant. This implies that the representation on the board by ethnic minorities has no impact on firm performance. This result is not unexpected because the GLS estimation technique is more advanced relative to the OLS estimation technique.

Nevertheless, in column 2, Table 8.2, the model presents some positively significant results with respect to relationships between the board size and independent directors and Tobin's Q.

The study uses the differenced GMM estimator, considered a more advanced regression technique for estimating the relationship between ethnic minorities and firm performance. The Arellano-Bond dynamic panel-data estimation is carried out to further address some of the econometric issues such as the endogeneity and unobservable fixed effects issues. These issues are perceived as not being adequately addressed by other econometric estimation models that have been used earlier for ethnic minority-firm performance relationship estimations. Therefore, the study runs the xtabond command for the estimations. More importantly, the dependent variables (i.e. Tobin's Q and ROA) are lagged back from period t-2 with 3 lags maximum. Ethnic Minority is included as an endogenous variable and lagged back from period t-2 with 3 lags maximum**.** CEO-Duality is included as a pre-determined variable. Industry and years dummies are included as exogenous variables. All other variables are included as independent variables. These variables are included as instruments for the difference equation. All the variables that collinear with one another have been excluded from the regression model.

Table 8.2

Estimations of the Relationship Between the Proportion of Ethnic Minority on the Board and Firm Performance

Dependent Variable: Tobin's Q	**Ord. Least Squares**	**Random Effect**	**Arellano - Bond**	**Arellano - Bover/Blundell-Bond**
Variable	**(OLS)**	**GLS**	**GMM-Diff**	**GMM-System**
Ethnic Minority	7.2**	3.60	46.85***	42.65***
	(2.26)	(1.03)	(2.71)	(3.38)
Independent Directors	10.48***	7.31***	-8.86	-10.13*
	(4.14)	(2.81)	-156	(-1.71)
Leverage	1.96	0.35	0.09	3.12
	(1.51)	(0.28)	(0.03)	(1.10)

Board Meetings Frequency	0.51	-0.04	-2.03**	-2.23**
	(1.17)	(-0.11)	(-2.21)	(-2.17)
Board Size	4.6***	3.73***	0.13	0.83
	(4.36)	(3.27)	(0.05)	(0.30)
Investment	-0.11	0.08	-0.21	2.83
	(-0.04)	(0.04)	(-0.05)	(0.63)
Firm Size	-0.53***	-0.89***	-4.38***	-1.74***
	(-2.69)	(-4.00)	(-4.81)	(-2.93)
Profitability	0.05	0.03	3.76	-4.49
	(0.47)	(0.27)	(-0.58)	(-0.66)
Foreign CEO	-0.84	-0.07	-1.51	-0.65
	(-1.31)	(-0.1)	(-0.79)	(-0.33)
Growth Opportunity	0.00	0.00	0.00	0.00
	(0.27)	(0.03)	(0.12)	(-0.06)
CEO Duality	-1.73	-1.03	-4.19	-4.46
	(-1.33)	(-0.83)	(-1.29)	(-1.73)
Tobin's Q (t-2)			0.01	0.12**
			(0.10)	(2.22)
Constant	-7.29**	-0.76	38.25***	16.6
	(-2.29)	(-0.22)	(2.76)	(1.41)
Industry Dummy	Included	Included	Included	Included
Year Dummy	Included	Included	Included	Included
R-Square	0.1728	0.1458		
F Value	3.94			
P Value	0.00			
Wald chi 2		57.31	157.51	408.32
Prob > chi2		0.0002	0.00	0.00
AR (1) test (*p-value*)			0.16	0.13
AR (2) test (*p-value*)			0.49	0.40
Observations	497	497	223	324

Notes: This table reports the results of regressions of the relationship between firm performance and the proportion of ethnic minority on the board. The regression coefficients are reported with the associated t-values (or z-values) in parenthesis. The significance level is described as follows: * significant at the 0.10 level; ** significant at the 0.05 level; *** significant at the 0.01 level.

Table 8.2: Estimation of the Relationship Between the Proportion of Ethnic Minority on the Board and Firm Performance

Tables 8.2 and 8.3 present the results of the relationship between the proportion of ethnic minorities on the board and firm performance using Differenced GMM. The result in column 3, Table 8.2 (i.e. $z = 2.71$, $p < 0.01$) shows the coefficients on Ethnic Minority is positive and

significant, implying that ethnic directors on the board enhance firm market performance. This suggests that firm value increases as the proportion of ethnic minorities on the board increases. The result also appears to provide support for Hypothesis 8a. In contrast, the results shown in column 3, Table 8.3 indicate a positive but insignificant relationship between ethnic minorities of Niger Delta origin on the board and firm performance, when the performance is measured using the ROA. This result suggests that the proportion of ethnic minorities on the board has no impact on firm performance. Column 3, Table 8.2 also shows a negative and significant relationship between firm size and the firm value, suggesting that a further increase in size will result in a lower firm value. Table 8.2, column 3 also reveals a negative and significant relationship between board meetings frequency and firm value. This suggests that the number of board meetings held annually contributes to poor firm performance. The average of five board meetings annually as shown in the Table 8.1 may be satisfactory but the negative impact might have resulted from the content of the board meetings and commitment of the board members, rather than the frequency of the board meetings per se.

Table 8.3
Estimations of the Relationship Between the Proportion of Ethnic Minority on the Board and Firm Performance

Dependent Variable: ROA	**Ord. Least Squares**	**Random Effect**	**Arellano -Bond**	**Arellano - Bover/Blundell-Bond**
Variable	**(OLS)**	**GLS**	**GMM-Diff**	**GMM-System**
Ethnic Minority	0.32	-0.02	0.00	0.21
	(0.25)	(-0.16)	0.00	-1.41
Independent Directors	0.11	-0.04	0.02	0.00
	(0.11)	(-0.68)	(0.32)	(-0.06)
Leverage	-1.62***	-0.05	-0.03	-0.02
	(-3.18)	(-1.63)	(-0.82)	(-0.71)
Board Meetings Frequency	-0.17	0.00	0.00	0.01
	(-0.98)	(0.43)	(0.29)	(0.87)

Board Size	0.28	-0.05	-0.02	-0.03
	(0.68)	(-1.52)	(-0.82)	(-0.94)
Investment	1.48	0.09*	0.09**	0.12**
	(1.42)	(1.91)	(2.04)	(2.44)
Firm Size	0.05	0.01*	0.02	0.01*
	(0.58)	(1.69)	(1.24)	(1.96)
Foreign CEO	0.13	0.01	-0.02	-0.04*
	(0.52)	(0.75)	(-0.70)	(-1.93)
Growth Opportunity	0.00	0.00	0.00	0.00
	(-0.06)	(-0.23)	(-0.52)	(-0.57)
CEO Duality	0.2	-0.03	-0.01	0.00
	(0.38)	(-1.12)	(-0.17)	(-0.11)
ROA (t-2)			-0.11**	-0.14***
			(-1.67)	(-2.90)
Constant	-0.45	0.01	0.09	0.06
	(-0.36)	(0.01)	(0.53)	(0.47)
Industry Dummy	Included	Included	Included	Included
Year Dummy	Included	Included	Included	Included
R-Square	0.0523	0.0016		
F Value	1.11			
P Value	0.33			
Wald chi 2		41.19	53.23	160.76
Prob > chi2		0.0159	0.00	0.00
AR (1) test (*p-value*)			0.01	0.00
AR (2) test (*p-value*)			0.73	0.67
Observations	508	508	216	317

Notes: This table reports results of regressions of the relationship between firm performance and the proportion of ethnic minority on the board. The regression coefficients are reported with the associated t-values (or z-values) in parenthesis. The significance level is described as follows: * significant at the 0.10 level; ** significant at the 0.05 level; *** significant at the 0.01 level.

Table 8.3: Estimation of the Relationship Between the Proportion of Ethnic Minority on the Board and Firm Performance

Given the fact that lagged levels of the regressors sometimes are weak instruments for the first-differenced regressors (Mileva, 2007) in order to increase efficiency, the study therefore uses the system GMM to estimate the relationship between the proportion of ethnic minorities on the board and firm performance. The model specification remains the same as listed in the differenced

GMM estimations discussed in prior sections. However, unlike the Differenced GMM, the System GMM estimator uses a system of two equations (i.e., one differenced and one in levels), where the variables in the level equation (i.e. in the second equation) are instrumented with their own first differences.

Tables 8.2 and 8.3 present the results of the System GMM estimation. The result in column 4, Table 8.2 shows there is a positive and significant association between the ethnic minority on the board and firm market valuation (i.e. $z = 3.38$, $p < 0.01$). The result indicates that an ethnic minority presence on the board enhances firm value. It suggests that the Nigerian firms could enhance their value by appointing more directors of Niger-Delta origin to their boards. The result provides support for hypothesis 2. In contrast, the result in column 4, Table 8.3 reveals a positive but insignificant association between the ethnic minority and accounting measure of performance. The significant results in column 4, Table 8.2 also reveal a negatively significant relationship between the independent directors, board meetings frequency, firm size and Tobin's Q. However, the results in column 4, Table 8.3 reveal a positively significant relationship between firm size and the accounting performance measure in contrast to the result obtained in column 4, Table 8.2 when the estimation technique is System GMM but the performance measure is Tobin's Q. The result thus suggests that firms can improve performance by increasing their capital expenditure and sizes. As indicated by the result in column 4, Table 8.3, the relationship between the Foreign CEO and firm performance is negative and significant. This suggests that firm performance will be worse when the CEO is a foreigner although this is not in line with the expectation.

8.3.2. The presence of Niger-Delta ethnic minority origin director on corporate boards and firm performance

Tables 8.4 and 8.5 present the results of the estimations of the relationship between the presence of ethnic minorities on the board and firm performance. Tobin's Q is used as a proxy for firm market performance while the ROA is the proxy for accounting performance. The main explanatory variable is the presence of Ethnic Minority (i.e. *DMinority).* Other explanatory and control variables include Firm size, Board Size, Leverage, Board Meetings Frequency, Investment, Profitability, Foreign CEO, Growth Opportunity, and CEO Duality. The Industry and Years dummies are also included in the regression model to control for the effect that industry types and years may have on the estimation. The variables that collinear with one another are excluded from the regressions.

Table 8.4
Estimations of the Relationship Between the Presence of Ethnic Minority
on the Board and Firm Performance

Dependent Variable: Tobin's Q	**Ord. Least Squares**	**Random Effect**	**Arellano -Bond**	**Arellano - Bover/Blundell-Bond**
Variable	**(OLS)**	**GLS**	**GMM-Diff**	**GMM-System**
DMinority	0.47	0.39	0.74	-1.12
	(0.97)	(0.76)	(-0.29)	(-0.53)
Independent Directors	10.19***	5.82***	1.15	6.06
	(4.73)	(2.61)	(0.27)	(1.50)
Leverage	2.17	0.47	-0.48	0.38
	(2.11)	(0.46)	(-0.23)	(0.18)
Board Meetings Frequency	0.28	-0.14	-0.95	-0.71
	(0.82)	(-0.47)	(-1.59)	(-1.15)
Board Size	3.81***	3.02***	0.45	0.65
	(4.44)	(3.32)	(0.23)	(0.32)
Investment	-0.74	0.05	0.58	1.16
	(-0.35)	(0.03	(0.20)	(0.39)
Firm Size	-0.44***	-0.72***	-3.62***	-2.21***
	(-2.86)	(-4.0)	(-5.35)	(-4.74)
Foreign CEO	-0.55	-0.01	-0.74	-0.19
	(-1.08)	(-0.01)	(-0.52)	(-0.14)

Growth Opportunity	0.00	0.00	0.00	0.00
	(0.34)	(0.05)	(0.06)	(-0.02)
CEO Duality	-1.51	-0.90	-0.70	-1.68
	(-1.40)	(-0.88)	(-0.26)	(-0.80)
Tobin's Q (t-2)			0.09*	0.18***
			(1.70)	(4.49)
Constant	-5.55**	-0.04	32.47***	18.58
	(-2.24)	(-0.01)	(3.29)	(2.22)
Industry Dummy	Included	Included	Included	Included
Year Dummy	Included	Included	Included	Included
R-Square	0.1452	0.1167		
F Value	4.08			
P Value	0.00			
Wald chi 2		56.15	158.64	537.38
Prob > chi2		0.00	0.00	0.00
AR (1) test (*p-value*)			0.27	0.25
AR (2) test (*p-value*)			0.91	0.44
Observations	626	626	322	465

Notes: This table reports results of regressions of the relationship between firm performance and the presence of ethnic minority on the board. The regression coefficients are reported with the associated t-values (or z-values) in parenthesis The significance level is described as follows: * significant at the 0.10 level; ** significant at the 0.05 level; *** significant at the 0.01 level.

Table 8.4: Estimation of the Relationship Between the Presence of Ethnic Minority on the Board and Firm Performance

Column 1, Table 8.4 shows the regression results using the OLS estimator. It reveals a positive but insignificant relationship between the presence of ethnic minorities and firm market performance. This implies that the presence of ethnic minority directors on the board has no influence whatsoever on firm value. Column 1, Table 8.5 also presents the result of the OLS ethnic minority presence-performance relationship. The result shows a negative and insignificant relationship between the presence of ethnic minority directors on the board and firm accounting performance. In a similar manner, the result implies no impact of ethnic minority directors on the board on the firm performance.

The study uses the Random Effect Generalized Least Squares (GLS) technique to test for whether or not the presence of ethnic minority directors on the board impacts firm value, while the model specification remains the same as stated in above. Column 2, Table 8.4 sets out the result of this estimation which similarly reveals a positive but insignificant relationship between ethnic minority directors on the board and Tobin's Q. However, the result in column 2, Table 8.5 shows that there is negative and significant relationship between the presence of ethnic minority directors on the board and accounting performance (i.e. $z = -1.73$, $p < 0.10$). The result indicates a negative impact on performance, which suggests that the more ethnic minorities on the board the lower the performance of the firm. The result does not, however, provide support for hypothesis 8b.

Table 8.5
Estimations of the Relationship Between the Presence of Ethnic Minority on the Board and Firm Performance

Dependent Variable: ROA	**Ord. Least Squares**	**Random Effect**	**Arellano - Bond**	**Arellano - Bover/Blundell-Bond**
Variable	**(OLS)**	**GLS**	**GMM-Diff**	**GMM-System**
DMinority	-0.28	-0.35*	-1.95*	0.01
	(-1.49)	(-1.73)	(-1.64)	(0.01)
Independent Directors	0.27	0.32	2.04	2.56
	(0.32)	(0.35)	(0.93)	(1.20)
Leverage	-1.25***	-1.23***	-0.62	-1.93*
	(-3.13)	(-2.93)	(-0.57)	(-1.79)
Board Meetings Frequency	-0.12	-0.13	-0.02	-0.14
	(-0.94)	(-0.96)	(-0.06)	(-0.46)
Board Size	0.27	0.26	0.24	0.71
	(-0.81)	(0.73)	(0.23)	(0.66)
Investment	0.99	0.90	1.06	1.28
	(1.22)	(1.08)	(0.71)	(0.81)
Firm Size	0.04	0.05	0.63	1.54***
	(0.68)	(0.73)	(1.49)	(4.96)
Foreign CEO	0.12	0.11	0.22	0.4
	(0.62)	(0.53)	(0.31)	(0.57)
Growth Opportunity	0.00	0.00	0.00	0.00

	(-0.12)	(-0.13)	(0.03)	(0.01)
CEO Duality	0.11	0.09	0.21	0.78
	(0.25)	(0.21)	(0.15)	(0.76)
ROA (t-1)			-0.04	-0.04
			(-0.59)	(-0.99)
Constant	-0.34	-0.38	-4.67	-16.6***
	(-0.35)	(-0.38)	(-0.85)	(-3.38)
Industry Dummy	Included	Included	Included	Included
Year Dummy	Included	Included	Included	Included
R-Square	0.0419	0.1167		
F Value	1.12			
P Value	0.32			
Wald chi 2		25.36	18.51	112.91
Prob > chi2		0.39	0.78	0.00
AR (1) test (*p-value*)			0.83	0.21
AR (2) test (*p-value*)			0.42	0.30
Observations	637	637	312	455

Notes: This table reports results of regressions of the relationship between firm performance and the presence of ethnic minority on the board. The regression coefficients are reported with the associated t-values (or z-values) in parenthesis The significance level is described as follows: * significant at the 0.10 level; ** significant at the 0.05 level; *** significant at the 0.01 level.

Table 8.5: Estimation of the Relationship Between the Presence of Ethnic Minority on the Board and Firm Performance

The study uses the Differenced GMM estimator in the analysis of the relationship between the presence of ethnic minority directors on the board and firm performance. The benefit of using the Differenced GMM estimator in the panel data regression analysis includes its effectiveness in addressing not only the endogeneity issues (Mura, 2007) but also the problem of any correlation between unobservable heterogeneity and explanatory variables (Mileva, 2007; Liu *et al*., 2015). Column 4, Table 8.4 shows the result of the estimation of the relationship between ethnic minorities directors on the board and firm market performance. The result reveals a negative but insignificant relationship, suggesting that the presence of ethnic minority directors on the board has no impact on market performance. However, the result in column 3, Table 8.5 reveals that there is a negative and significant relationship between the presence of ethnic minority directors

on the board and accounting performance (i.e. $z = -1.64$, $p < 0.10$). These results suggest that mere presence of at least one ethnic minority director on the board will not enhance firm performance.

The study estimates further the relationship using the System GMM (i.e. the augmented version of the Differenced GMM). The benefit of System GMM over the Differenced GMM is that it increases efficiency of the regression estimates (Mileva, 2007). Column 4, Table 8.4 presents the result of the relationship between ethnic minority and Tobin's Q. The result shows a negative but insignificant relationship. The result in Column 4, Table 8.5 reveals however that there is a positive but similarly insignificant relationship between the presence of ethnic minority directors and accounting performance measures. The results suggest that the presence of ethnic minorities on the board has no influence on the performance of the firm. None of these results using the System GMM provides support for hypothesis 8b.

8.3.3. The representation of female directors on corporate boards and firm performance.

Tables 8.6 and 8.7 present the results of the estimations of the relationship between the proportion of women on the board and firm performance. The main explanatory variable is the proportion of women on the board (i.e. *Women).* Some of the firm's characteristics which may affect both the company's corporate governance practices and thus performance is included in the estimation model. These include the Board Size, Leverage Board Meetings Frequency, Investment, Profitability, Foreign CEO, Growth Opportunity, and CEO Duality. The Industry and Years dummies are also included in the regression model to control for the effect that industry types and years may have on the estimation.

Table 8.6

Estimations of the Relationship Between the Proportion of Women on the Board and Firm Performance

Dependent Variable: Tobins'Q	Ord. Least Squares	Random Effect	Arellano -Bond	Arellano - Bover/Blundell-Bond
Variable	(OLS)	GLS	GMM-Diff	GMM-System
Women	-1.22	-1.88	-2.73	3.27
	(-0.55)	(-0.89)	(-0.19)	(0.31)
Independent Directors	12.82***	9.67***	1.27	10.44*
	(4.70)	(3.46)	(0.19)	(1.68)
Leverage	3.15**	1.49	-1.72	-0.16
	(2.31)	(1.10)	(-0.47)	(-0.05)
Board Meetings Frequency	0.38	0.07	-1.14	-1.37
	(0.88)	(0.18)	(-1.28)	(-1.58)
Board Size	4.94***	4.38***	1.05	3.76
	(4.60)	(3.96)	(0.33)	(1.32)
Investment	-0.50	-0.02	2.21	1.14
	-0.20)	(-0.01)	(0.49)	(0.25)
Firm Size	-0.80***	-0.92***	-5.55***	-2.87***
	(-3.71)	(-4.05)	(-5.52)	(-5.03)
Profitability	2.17	1.60	0.14	-0.16
	(1.22)	(0.93)	(0.02)	(-0.03)
Foreign CEO	-0.79	-0.37	-1.62	1.63
	(-1.17)	(-0.51)	(-0.69)	(0.84)
Growth Opportunity	-0.15	-0.10	-1.46	-1.40
	(-0.18)	(-0.13)	(-1.04)	(-1.00)
CEO Duality	-2.32	-1.49	-0.15	-1.24
	(-1.52)	(-1.01)	(-0.04)	(0.38)
Tobin's Q (t-1)			0.10	0.29***
			(1.23)	(4.55)
Constant	-6.22*	-2.46	57.39***	0.25***
	(-1.86)	(-0.74)	(4.87)	(2.82)
Industry Dummy	Included	Included	Included	Included
Year Dummy	Included	Included	Included	Included
R-Square	0.201	0.1901		
F Value	4.36			
P Value	0.0000			
Wald chi 2		67.50	91.59	254.55
Prob > chi2		0.0000	0.0000	0.0000
AR (1) test (*p-value*)			0.26	0.24
AR (2) test (*p-value*)			0.15	0.19

Observations	459	459	222	345

Notes: This table reports results of regressions of the relationship between firm performance and the proportion of women on the board. The regression coefficients are reported with the associated t-values (or z-values) in parenthesis. The significance level is described as follows: * significant at the 0.10 level; ** significant at the 0.05 level; *** significant at the 0.01 level.

Table 8.6: Estimation of the Relationship Between the Proportion of Women on the Board and Firm Performance

Column 1 in Tables 8.6 and 8.7 show regression estimation results using the OLS estimator. The result in column 1, Table 8.6 reveals a negative and insignificant association between the proportion of women on boards and firm market performance. This is similar to the OLS estimation result when the accounting measure of performance is used, as revealed in column 1, Table 8.7, which also indicates a negative and insignificant relationship. These results suggest that women on boards do not have an impact on firm performance and none of the results using the OLS estimator provides support for hypothesis 7.

The study also carries out the random effect GLS model estimation of the women-firm performance relationship which serves as a robustness check on the results. The GLS random effects regression results presented in Column 2 of Tables 8.6 and Table 8.7 show insignificant relationships, suggesting that the proportion of women on boards has no influence on the firm performance.

Table 8.7

Estimations of the Relationship Between the Proportion of Women on the Board and Firm Performance

Dependent Variable: ROA Variable	Ord. Least Squares (OLS)	Random Effect GLS	Arellano -Bond GMM-Diff	Arellano - Bover/Blundell-Bond GMM-System
Women	-0.04	-0.03	-0.39**	-0.54***
	(-0.30)	(-0.46)	(-2.35)	(-3.19)
Independent Directors	-0.02	0.08	0.13	0.21**
	(-0.11)	(1.06)	(1.59)	(2.36)
Leverage	-0.23***	-0.02	0.01	0.11**
	(-2.64)	(-0.64)	(0.25)	(2.31)
Board Meetings Frequency	0.05	-0.00	0.01	0.01
	(1.80)	(-0.21)	(1.04)	(0.72)
Board Size	0.00	-0.01	-0.00	0.02
	(0.00)	(-0.37)	(-0.05)	(0.55)
Investment	0.24	0.08	0.12**	0.03
	(1.42)	(1.48)	(2.23)	(0.40)
Firm Size	0.01	0.02	0.02	0.01
	(0.79)	(1.99)	(0.91)	(1.01)
Foreign CEO	-0.05	-0.01	-0.01	-0.02
	(-1.08)	(-0.42)	(-0.46)	(-0.58)
Growth Opportunity	0.00	0.01	0.00	0.01
	(-0.04)	(0.68)	(0.26)	(0.40)
CEO Duality	0.02	-0.04	0.02	0.05
	(0.17)	(-1.24)	(0.35)	(0.96)
ROA (t-1)			0.09	0.68
			(1.12)	(18.85)
Constant	0.03	-0.13	-0.23	-0.64***
	(0.14)	(-0.55)	(-1.00)	(-3.94)
Industry Dummy	Included	Included	Included	Included
Year Dummy	Included	Included	Included	Included
R-Square	0.1328	0.0215		
F Value	2.82			
P Value	0.0000			
Wald chi 2		45.28	66.42	656.45
Prob > chi2		0.0054	0.0000	0.0000
AR (1) test (*p-value*)			0.15	0.13
AR (2) test (*p-value*)			0.80	0.23
Observations	467	467	221	346

Notes: This table reports results of regressions of the relationship between firm performance and the proportion of women on the board. The regression coefficients are reported with the associated t-values (or z-values) in parenthesis. The significance level is described as follows: * significant at the 0.10 level; ** significant at the 0.05 level; *** significant at the 0.01 level.

Table 8.7: Estimation of the Relationship Between the Proportion of Women on the Board and Firm Performance

The Dynamic Panel estimators are also used to address both the endogeneity issues and the problem of a possible correlation between the unobservable heterogeneity contained in the residuals and the explanatory variables (Mura, 2007). The results presented in columns 3 and 4 in Table 8.6 reveal that there is an insignificant relationship between the proportion of women on the board and firm market performance, when the GMM Difference and GMM System estimators are used. The results further suggest that women represented on the board have no impact on firm market performance and thus does not provide support for hypothesis 3. These results are consistent with findings in Carter *et al.* (2010)

However, the results presented in column 3 and 4, Table 8.7, reveal a negative and significant association between women on the board and firm accounting performance, when the Dynamic Panel estimators are used (i.e. $z = -2.35$, $p < 0.05$, using the GMM Difference model and $z = -3.19$, $p < 0.001$, when the GMM System estimator is employed). This result suggests that women on corporate boards do not appear to be effective monitors and thus this does not provide support for hypothesis 9a.

8.3.4. The presence of female directors on corporate boards and firm performance

Tables 8.8 and 8.9 present the results of the estimations of the relationship between the presence of at least one woman on the board and firm performance. Tobin's Q is used to proxy for firm market performance while the ROA is the proxy for accounting performance. The main

explanatory variable is the presence of women (i.e. *DWomen)*. Other explanatory and control variables include Firm size, Board Size, Leverage, Board Meetings Frequency, Investment, Profitability, Foreign CEO, Growth Opportunity, and CEO Duality. The Industry and Years dummies are also included in the regression model to control for the effect that industry types and years may have on the estimation.

Table 8.8

Estimations of the Relationship Between the Presence of Women on the Board and Firm Performance

Dependent Variable: Tobin's Q	**Ord. Least Squares**	**Random Effect**	**Arellano - Bond**	**Arellano - Bover/Blundell-Bond**
Variable	**(OLS)**	**GLS**	**GMM-Diff**	**GMM-System**
DWomen	-0.57	-82*	-0.37	1.79
	(-1.26)	(-1.78) ***	(-0.23)	(1.20)
Independent Directors	10.59***	6.27	-0.22	4.13
	(4.93)	(2.83)	(-0.06)	(1.00)
Leverage	2.16**	0.38	-0.56	0.41
	(2.09)	(0.37)	(-0.27)	(0.19)
Board Meetings Frequency	0.29	-0.14	-1.07	-0.87
	(0.87)	(-0.47)	(-1.80)	(-1.37)
Board Size	4.22***	3.39***	-0.86	0.17
	(5.18)	(3.89)	(-0.46)	(0.08)
Investment	-0.55	0.32	-0.31	-1.17
	(-0.26)	(0.17)	(-0.11)	(-0.36)
Firm Size	-0.43***	-0.72***	-3.51***	-1.92***
	(-2.79)	(-4.03)	(-4.99)	(-3.93)
Foreign CEO	-0.56	0.02	-0.07	1.09
	(-1.11)	(0.03)	(-0.05)	(0.77)
Growth Opportunity	0.00	0.00	0.00	0.00
	(0.28)	(0.01)	(0.14)	(0.03)
CEO Duality	-1.49	-0.91	-1.26	-1.99
	(-1.42)	(-0.89)	(-0.48)	(-0.95)
Tobin's Q (t-2)			0.08	0.20***
			(1.53)	(4.93)
Constant	-6.22	-0.43	39.42	18.71**
	(-2.59)	(-0.17)	(4.34)	(2.20)
Industry Dummy	Included	Included	Included	Included

Year Dummy	Included	Included	Included	Included
R-Square	0.15			
F Value	4.13			
P Value	0.00			
Wald chi 2		59.58	165.07	491.7
Prob > chi2		0.00	0.00	0.00
AR (1) test (*p-value*)			0.25	0.23
AR (2) test (*p-value*)			0.36	0.20
Observations	628	628	322	467

Notes: This table reports results of regressions of the relationship between firm performance and the presence of women on the board. The regression coefficients are reported with the associated t-values (or z-values) in parenthesis. The significance level is described as follows: * significant at the 0.10 level; ** significant at the 0.05 level; *** significant at the 0.01 level.

Table 8.8: Estimation of the Relationship Between the Presence of Women on the Board and Firm Performance

Column 1, Table 8.8 shows the regression results using the OLS estimator. It reveals a negative but insignificant relationship between the presence of ethnic women and firm market performance. Column 1, Table 8.9 also presents the results of the OLS estimation of the women presence-performance relationship when the accounting measure of performance is used. The result shows a positive but insignificant relationship. Both results imply that the presence of female directors on the board has no influence whatsoever on firm value and does not provide support for hypothesis 9b.

Table 8.9
Estimations of the Relationship Between the Presence of Women on the Board and Firm Performance

Dependent Variable: ROA	**Ord. Least Squares**	**Random Effect**	**Arellano - Bond**	**Arellano - Bover/Blundell-Bond**
Variable	**(OLS)**	**GLS**	**GMM-Diff**	**GMM-System**
DWomen	0.13	0.18	1.54**	2.61***
	(0.73)	(0.94)	(2.06)	(3.75)

Independent Directors	0.11	0.10	0.56	0.18
	(0.13)	(0.12)	(0.27)	(0.09)
Leverage	-1.25***	-1.22***	0.07	-1.05
	(-3.13)	(-2.92)	(0.07)	(-1.01)
Board Meetings Frequency	-0.12	-0.13	0.03	-0.11
	(-0.99)	(-1.01)	(0.13)	(-0.36)
Board Size	0.07	0.02	0.19	0.75
	-0.23	(0.06)	(0.18)	(0.74)
Investment	0.96	0.85	0.60	0.63
	(1.16)	(1.01)	(0.40)	(0.41)
Firm Size	0.03	0.04	0.72*	1.65***
	(0.56)	(0.59)	(1.70)	(5.53)
Foreign CEO	0.13	0.11	-0.25	0.53
	(0.64)	(0.54)	(-0.36)	(0.79)
Growth Opportunity	0.00	0.00	0.00	0.00
	(-0.09)	(-0.09)	(-0.08)	(-0.03)
CEO Duality	0.15	0.13	-0.04	1.59
	(0.37)	(0.32)	(-0.04)	(1.68)
ROA (t-2)			0.01	-0.01
			(0.31)	(-0.17)
Constant	0.00	0.02	-6.66	-14.34***
	0.00	(0.03)	(-1.26)	(-3.14)
Industry Dummy	Included	Included	Included	Included
Year Dummy	Included	Included	Included	Included
R-Square	0.04	0.04		
F Value	1.04			
P Value	0.41			
Wald chi 2		23.18	19.82	119.98
Prob > chi2		0.51	0.71	0.00
AR (1) test (*p-value*)			0.28	0.20
AR (2) test (*p-value*)			0.60	0.40
Observations	639	639	312	457

Notes: This table reports results of regressions of the relationship between firm performance and the presence of women on the board. The regression coefficients are reported with the associated t-values (or z-values) in parenthesis. The significance level is stated as follows:
* significant at the 0.10 level; ** significant at the 0.05 level; *** significant at the 0.01 level.

Table 8.9: Estimation of the Relationship Between the Presence of Women on the Board and Firm Performance

The study performs the same estimation using the Random Effects Generalized Least Square (GLS) technique. The results shown in column 2, Table 8.8 reveal a negative and significant relationship between the presence of at least one female director on the board and firm market performance (i.e. $z = -1.78$, $p < 0.10$). The result implies that the presence of women on the board does not enhance firm value. It suggests that the firm's value will fall as more women are represented on the board. The result does not provide support for hypothesis 3. Column 2, Table 8.9, on the other hand, with the results of when the GLS estimation is performed and the measure of performance is ROA, shows that there is a positive but insignificant relationship, meaning that the presence of women on the board has no impact on firm performance.

As with other relationship estimations models, an attempt is also made in this study when estimating the women on the board-performance relationship to address the problem of endogeneity and unobservable fixed effects contained in the error term (e.g. time-invariant characteristics), which may correlate with the explanatory variables. Thus, the study makes use of the Dynamic Panel Data estimators. First, it uses the Differenced GMM technique to estimate this model. The results in column 3, Table 8.9 reveal that there is a positive and significant relationship between the presence of women on the board and firm accounting performance (i.e., $z = 2.06$, $p < 0.05$). The result suggests that the presence of women on the board enhances firm performance. It appears, therefore, that this result provides support for hypothesis 7. The results in column 3, Table 8.8 on the other hand indicate a negative and insignificant association between the presence of women and market firm performance, meaning that the presence of women on the board has no impact on firm value.

The study also uses the System GMM technique to estimate the relationship between the presence of women and firm performance, as the system GMM estimator is an improvement over that of the Differenced GMM. Column 4 in Table 8.9 presents the result of the estimation of the

relationship between the presence of women on the board and firm performance. The result reveals that there is a positive and significant relationship between the presence of women and firm accounting performance (i.e. $z = 3.75$, $p < 0.01$), and implies that firm value can be enhanced by appointing at least one female director to the board. This result provides support for hypothesis 7. In contrast, the result presented in column 4 in Table 8.8 shows an insignificant relationship between the presence of women on the board and firm market performance, meaning the presence of women on boards has no influence on firm value. The result does not support hypothesis 9b

The investigations and empirical findings regarding the relationship between the representation and presence of women and Niger-Delta ethnic origin directors on the boards of Nigerian companies reveal a mix of positive and negative associations with firm performance. A further discussion of the findings is contained in section 8.4

8.3.5. Are females and Niger-Delta ethnic minority origin directors valued or token board members?

Prior studies argue that each director on the board brings unique resources to the firm (Kesner, 1988; Kosnik, 1990). Resource dependence theory points out that the directors, in addition to legitimacy, may bring to the board several other resources among which are expertise and links to critical external contingencies facing the firm (Hillman, Cannella, Jr, and Harris, 2002). Based on a more detailed discussion in section 3.4 from the resource-dependence perspective, the expectation is that the female and ethnic minority directors are appointed to boards based on a desire to broaden the board's resource base, and not just because it is the 'right thing' to do. Therefore, following the approach used in Hillman, Cannella, Jr, and Harris (2002), the study examines the resource dependence role of the female and Niger-Delta ethnic minority directors on the boards of Nigerian listed firms.

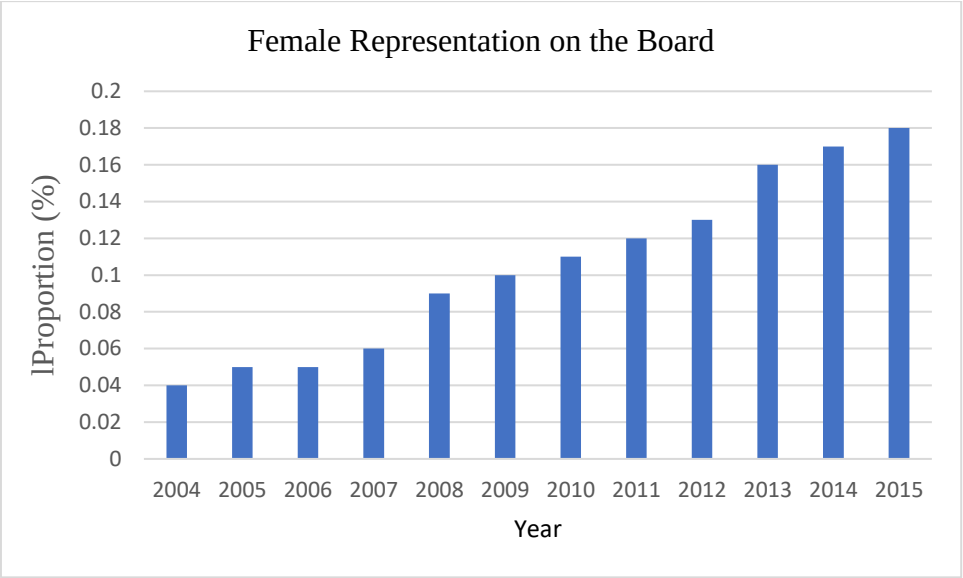


Figure 8.1: Trend of Female Representation on the Nigerian corporate boards (2004-2015)

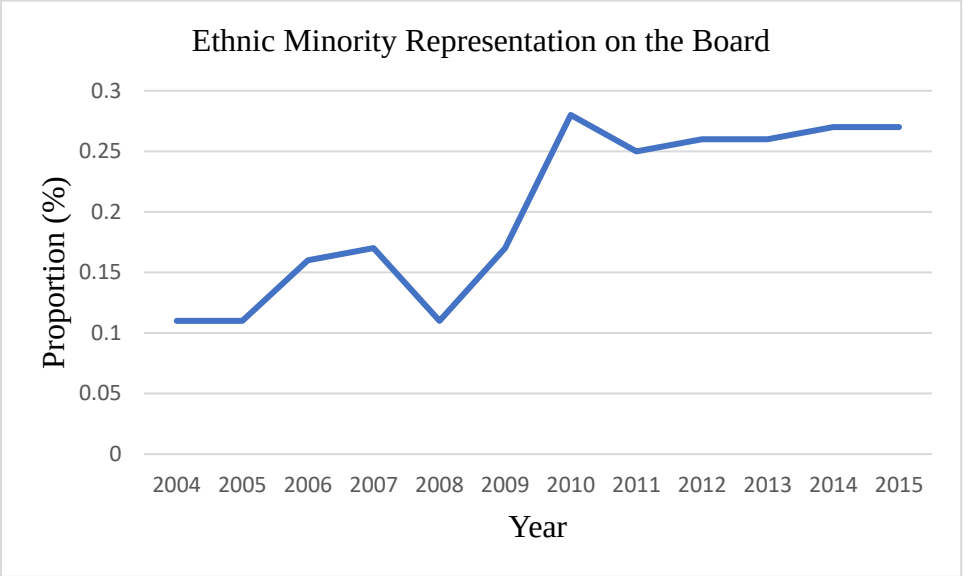


Figure 8.2: Trend of Ethnic Minority Representation on the Nigerian corporate boards (2004-2015)

Figures 8.1 and 8.2, show that, the proportion of the board members that are female directors and the proportion that are ethnic minority directors in each year during the twelve-year period of the investigation. Figure 8.1 shows a rising trend of females' membership of the

corporate board during the period. It shows that, the minimum proportion of the board that is female is about 4 per cent on average and the maximum is about 18 per cent on average. The overall average proportion of a corporate board that is female over the 12-year period is about 11 per cent. This suggests a significant improvement in the positioning of women in modern-day Nigerian society, in contrast to old practices and gender role stereotyping. Figure 8.2 reveals a similar pattern regarding the proportion of board membership that is ethnic minority. It shows that the minimum proportion of the board that is ethnic minority is about 11 per cent on average and the maximum is about 27 per cent on average. The average proportion of the board accounted for by ethnic minorities over the twelve-year period is about 17 per cent. This suggests that ethnic minorities also constitute a sizable proportion of the entire board size during the period and their membership shows a rising trend.

Table 8.10: Analysis of Female Directors' participation in the Resource Provision (2004-2015)

Females on the board				
Number	**%**	**Category of Resource provided**	**Areas of resource needs**	**Types of female directors in resource category**
212	37.5	Board committee membership	Accounting, audit, and/or finance skills to be able to serve on audit & finance committees respectively. HR knowledge for serving on nomination and selection committee etc.	Members with relevant skills (e.g. auditors on audit committee)
96	17.11	Human capital development	Contributing to the corporation's pool of skills and knowledge by appointing females with higher education	Holders of advanced degree

108	19.25	Occupational support	Providing specialized expertise on law, engineering, banking, insurance etc. Creating channel of communication to government agencies, suppliers etc. Facilitating access to vital resources such as finance etc.	The professionals (e.g. lawyers; engineers)
65	11.59	Community-Firm Relations	Have connections with powerful groups in the community. Provide non-business perspectives on issues, problems and ideas. Have political connections.	Local chiefs, political leaders, clergy member
80	14.26	Membership of other corporate boards	Serve on boards of other corporations. Bring to the firm variety of board experiences.	Current and past directors of other public corporations
561	99.71			

Table 8.10: Analysis of Female Directors' Participation in Resource Provision (2004-2015)

Table 8.10 presents the analysis of resource dependence roles of female directors sitting on the boards of Nigerian listed firms. The study examines a sub-sample that comprises 561 female directors over a twelve-year period (2004-2015). The study classifies the resources that female directors bring to the board into five main categories, and analyses the values that they contribute to the firm. The results of the analysis reveal that about 38 per cent of the sub-sample female directors examined serve on at least one of four important board committees, such as the audit

committee, finance and strategy committee, nomination and selection committee, and executive management committee. Besides the audit committee which is statutorily required to be established by a company[23] and other important committees enumerated above, findings reveal that, firms establish various other forms of board committees which although they might carry different names but perform very similar functions. The type of female directors that are appointed to serve on a board committee is determined by the relevance of the skills that they possess. For example, those with finance/accounting backgrounds would normally be appointed to the audit and/or finance committee; those with human resources experience would be likely to serve on the nomination and selection Committee; executives on the executive committee, and so on.

Another aspect of the resource roles they occupy that has been examined is their involvement in contributing to human capital development. The analysis carried out reveals that about 17 per cent of the 561 females over the twelve-year period have higher degrees and thus contribute to the human capital development of the firms.

The analysis carried out in the study shows that about 19 percent of the 561 female directors that were examined during the period (i.e. 2004-2015) provide the firms with needed occupational support. Hillman, Cannella, Jr, and Harris (2002) note that a variety of occupational representation on a board helps to expand the pool of expertise. The type of female directors that provide firms with occupational support include professionals such as lawyers, engineers and public relations consultants.

Besides the expertise that they provide, the directors also provide linkages to external contingencies facing the firm (Hillman, Cannella, Jr, and Harris, 2002). The study examines the female director's community-firm relations roles. About 12 per cent of the 561 female directors

[23] The Nigerian corporate governance code requires every public company under Section 359 (3) and (4) of CAMA to establish an audit committee (SEC Code, 2003).

examined during the twelve-year period appear to perform a community-firm relations role. The directors in this category have connections with powerful groups in the community and provide the board with non-business perspectives on resolving issues and problems. The directors in this resource category include female leaders, traditional chieftains, female members of the parliament, female members of the clergy, etc.

The study also examines the female directors' roles as members of other corporate boards. The analysis carried out shows that about 14 percent of the 561 female directors examined also serve on other corporate boards. The experiences gained from other boards improve the quality of the board's decisions.

Table 8.11: Analysis of Ethnic Minority Directors' role in Resource Provision (2004-2015)

Ethnic Minority on the board				
Number	**%**	**Category of Resource provided**	**Areas of resource needs**	**Types of directors in resource category**
172	27.0	Business Expertise Support	Expertise on problem solving, decision-making and competition. Channels of communication between the firm and other ones. Source of ideas and providing alternative solutions to problems.	Current and former directors and senior officers of other corporations
182	28.0	Specialized Skills Support	Provide specialized expertise on variety of fields law, engineering, banking, insurance etc. Create channels of communication to government agencies, suppliers etc. Facilitate access to vital resources such as finance etc.	Engineers, Lawyers, Investment and Commercial Bankers, Insurance experts, Public relations experts, Accountants etc.

158	25.0	Community-Firm Relations Support	Have connections with powerful groups in the community. Provide non-business perspectives on issues, problems and ideas. Have political connections.	Local chieftains, Political leaders, University Lecturers, Clergy men and women, Leaders of social and cultural organizations etc.
130	2.0	Insider Expertise Support	Knowledge of the firm itself and the industry; expertise on business strategy and direction	Former and current officers of the firm
642	100			

Table 8.11: Analysis of Ethnic Minority Directors' role in Resource Provision (2004-2015)

Table 8.11 presents the analysis of resource dependence roles of the Niger-Delta ethnic minority origin directors on the boards of Nigerian listed firms. In a similar manner to the gender study, the study examines a sub-sample that comprises 642 ethnic minority directors over a twelve-year period (2004-2015). The study classifies the resources that ethnic minority directors bring to the board into four broad categories and analyses the values contributed to the firm.

The results of the analysis reveal that about 27 per cent of the 642 sub-sample ethnic minority directors examined for the twelve-year period are business experts. This category of directors comprises both current and former executive directors that serve on other large corporate boards. Because such directors serve on other boards in an executive capacity, they therefore bring to the firm a working knowledge in strategic decision-making and internal operational processes. Furthermore, because they acquire their experience from outside the firm, they are able to provide

the firm with alternative perspectives, advice and valuable information about how other firms deal with certain issues and problems. They also build legitimacy for the firm as they serve on its board.

The firm also requires support involving specialized skills. The analysis presented in Table 8.11 also shows that about 28 per cent of the 642 minority directors examined during the period provide firms with specialized skills support, and this category can be compared to Baysinger and Zardkoohi's (1986) decision supporters, and Hillman, Cannella, Jr, and Harris's (2002) support specialists. The types of director in this category include engineers, lawyers, investment/commercial bankers, insurance experts, public relations consultants, etc. These director types provide expertise and linkages in specific areas requiring specialized skills to support the top executive management in strategic decision-making. Their roles are quite distinct from those of the directors categorised as business experts as discussed earlier, in that they lack the general management experience usually obtainable as executive directors in large corporate organizations. As argued in Hillman, Cannella, Jr, and Harris (2002), these individuals bring to the board specific skills; they provide information about environmental contingencies and how to get access to these resources, all of which provide support for the firm's competitive strategy. The representation on the board of the individuals providing such functions symbolically provides the firm with legitimacy.

Another important resource role of the directors is the linkage to the firm's environment. The analysis in Table 8.11 shows that about 25 per cent of the 642 sub-sample examined comprising of Niger-Delta ethnic minority directors perform community-firm relations roles. The classification of directors into community-firm relations experts in this study is similar to that of Baysinger and Zardkoohi's (1986) symbolic directors, and Hillman, Cannella, Jr, and Harris's (2002) community influencers. The directors in this category are those who by origin are Niger-Delta ethnic minorities. They include the local chieftains, political leaders, university lecturers,

clergy men and women, leaders of social and cultural organisations, etc. These directors are believed to have knowledge about and/or have influence over powerful social groups and non-business organisations in their communities, whose interests it is assumed may sometimes conflict with those of the firms (Hillman, Cannela and Paetzold, 2000).

The Niger-Delta ethnic minority directors' influence over the powerful pressure groups in the Niger-Delta region have greatly helped to reduce incessant clashes between the oil-producing firms operating in the Niger-Delta region and their host communities. These community-firm relations directors serve on the board in part to ensure a peaceful and harmonious co-existence with their host communities. The position in support of this resource role of the directors is reinforced in the work of Selznick (1965), who argues that the directors performing community-firm relations roles are included on boards as a means of averting threats to the firm's stability or existence. In addition, these directors provide non-business perspectives on the board's deliberations and strategies. The community-firm relations roles also provide the firm with legitimacy (Hillman, Cannela and Paetzold, 2000).

The study also examines the insiders' expertise support that the directors bring to the board. The analysis presented in Table 8.11 shows that about 20 per cent of the 642 ethnic minority directors examined over the twelve-year period provide insider expertise support. The director types included in this resource category include current and former officers of the firm, employees and owners of the firm. This category of director provides information about the firm itself and its competitive environment, providing expertise on the firm and on business strategy and direction. Although ethnic minority directors who are insiders may have attributes that enable them to provide valuable resources from the external environment, this is not however the rationale behind their directorship (Hillman, Cannela and Paetzold, 2000). The Niger-Delta ethnic minority

directors who are on boards as executive directors also possess expertise in specific areas such as engineering, finance, law and human resources.

Table 8.12: Trend Analysis on Female Directors' participation in Resource Provision (period: 2004 -2015)

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Board Committee membership	0.02	0.04	0.05	0.08	0.09	0.09	0.1	0.1	0.11	0.11	0.14	0.14
Human Capital Development	0	0.05	0.07	0.11	0.14	0.07	0.07	0.09	0.11	0.09	0.11	0.11
Occupational Support	0.03	0.03	0.05	0.06	0.11	0.11	0.13	0.13	0.13	0.13	0.14	0.16
Community - Firm Relations	0.06	0.09	0.05	0.03	0.09	0.18	0.11	0.08	0.09	0.09	0.11	0.14
Membership of other corporate board	0.03	0.01	0.01	0.03	0.01	0.11	0.16	0.11	0.13	0.13	0.15	0.15

Table 8.12: Trend Analysis of Female Directors' Participation in Resource Provision (2004-2015)

Table 8.12 presents the trend analysis of female directors' participation in resource provision to Nigerian listed firms during the period 2004-2015. Row 1 in Table 8.12 shows the proportion of female directors that served on at least one of the four important board committees (audit, finance, nomination/selection and executive management committees) in each year during the twelve-year period. The row indicates a rising trend in female participation, from 2 per cent in 2004 to 14 percent participation in 2015. Although the increase was not even from year to year but

it thus shows sign of improvement over time. Table 8.12, row 2 shows the percentage of female directors that contribute to human capital development each year during the 2004-2015 period.

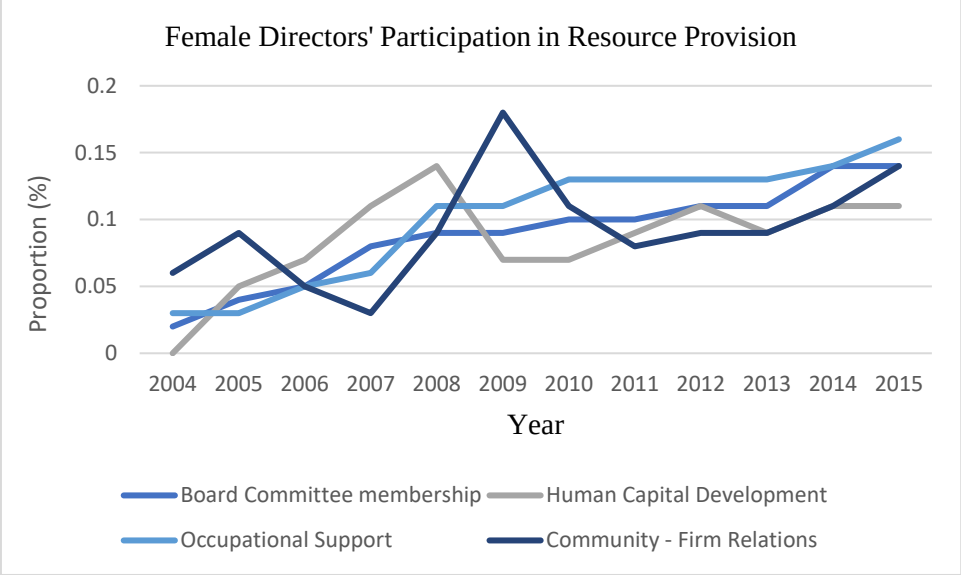


Figure 8.3: Trend of Female Director's Participation in Resource Provision (2004-2015)

The table shows a rising trend in the percentage of women that have a higher degree from 2004 to 2015, with no female directors in 2004 to 11 percent in 2015. However, period witnessed a fall and rise in female participation human capital provision. Row 3 similarly shows a rising trend of female directors' participation in providing the firm with the needed occupational support. The proportion of female directors rose from 3 per cent in 2004 to 13 per cent in 2010; it remained at the same level before beginning to risen again in 2014 and 2015. The Row 4 of the Table presents the proportion of female directors that provided community-firm relations support to the firms during the period. It shows that about 6 percent of the overall female directors did perform this role in 2004. The percentage level rose and fell until 2012, when it started to rise to about 14 per cent in 2015. Row 5 provides the trend of the female directors' membership of other corporate boards. The percentage of female director that perform this role also show a rising trend from 3 percent in 2004 to 15 per cent in 2015, although with minor fluctuations during the period. In

summary, Table 8.12 shows a rising trend of female directors' participation in resource provision during the 2004-2015 period, but with some few fluctuations.

Table 8.13: Trend Analysis on Ethnic Minority's participation in Resource Provision (period: 2004 – 2015)

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Business Expertise	0.01	0.03	0.05	0.09	0.1	0.07	0.12	0.1	0.1	0.12	0.13	0.18
Specialized Expertise Support	0.02	0.04	0.03	0.07	0.15	0.12	0.09	0.08	0.1	0.12	0.13	0.13
Community-Firm Relations	0.02	0.08	0.04	0.09	0.09	0.09	0.12	0.13	0.12	0.11	0.11	0.13
Executive management competencies	0.03	0.04	0.09	0.07	0.09	0.07	0.08	0.09	0.09	0.09	0.13	0.13

Table 8.13: Trend Analysis of Ethnic Minority's Participation in Resource Provision (2004-2015)

Table 8.13 presents a trend analysis on Niger-Delta ethnic minority directors' participation in resource provision to Nigerian listed firms during the period 2004-2015. Row 1 in Table 8.13 shows the proportion of ethnic minority directors that provided business expertise support to the firm in each year during the twelve-year period. The level of participation shows a rising trend from 1 per cent in 2004 to 10 per cent in 2008. There was a rise and fall in the level of their involvement from 2009 until 2012 when it began to rise and reached the highest of 18 per cent in 2015. Row 2, Table 8.13 shows the trend of ethnic minority participation in providing specialized skills support to the firm during the period. Their participation in this resource provision rose from 2 per cent in 2004 to 15 per cent in 2008, but slightly fallen up till 2012 and began to rise in 2013. Rows 4 and 5 respectively show the degree of ethnic minority directors' participation in the provision of community relations and insider expertise support during the twelve-year period. Table 8.13 also shows a rising trend of resources provision in each of these resource categories during the period. In summary, Table8.13 shows a rising trend of ethnic minority participation in four categories of resource provision during the 2004-2015 period, but with a few fluctuations during the period.

8.4. Discussion of findings and implications

The study investigates the relationship between gender and ethnic minority diversity and firm performance on a sample of Nigerian listed firms over a period between 2004 and 2015, and provides several interesting findings. The study finds that the representation[24] of Niger-Delta ethnic minority directors on corporate boards has a positively significant association with the firm

[24] The ethnic minority representation on the board is measured by the proportion of the board members that are ethnic minority directors.

market performance. This implies that the representation of Niger-Delta ethnic minorities on boards has a positive impact on firm value, meaning that, as the proportion of ethnic minority directors on the board increases, so the firm value rises. The finding suggests that ethnic minority directors on the board are effective in performing their monitoring roles. Therefore, the performance of Nigerian firms can be enhanced by increasing the proportion of ethnic minorities sitting on the board. This finding provides support for hypothesis 8 and is consistent with the agency theoretical prediction of improved firm performance with the presence of greater proportion of outside directors on the corporate board (Jensen and Meckling, 1976). The result is also consistent with prior studies. For example, Ntim (2015) investigates whether the stock market values ethnic and gender diversity within corporate boards. The study reports that board diversity is positively associated with market performance. Furthermore, the study distinctively demonstrates that ethnic diversity is valued more valued by the stock market than gender diversity. Similarly, the finding in this study is also consistent with other prior studies (e.g. Carter, Simkins and Simpson, 2003; Ntim, 2015)

Using an indicator variable[25] as an alternative measure of the ethnic minorities' participation on the board, the study however finds that the presence of at least one Niger-Delta ethnic origin minority on the board has a negatively significant association with firm accounting performance. This finding implies that accounting performance cannot be enhanced by the 'token' presence of one or more ethnic minority director on the board; appointing directors of ethnic minority origin to the board could appear to often be motivated by social pressure rather than based on economic rationale.

[25] A binary that takes a value of 1 if at least one Niger-Delta ethnic minority origin director is on the board, otherwise zero.

Regarding the investigation on the monitoring role of women on the board, the study finds a negative and significant association, suggesting that women do not appear to be effective monitors. The finding could be because of the low level of women's participation on Nigerian corporate boards, as their board membership may not be sufficient to make a positive impact. Nigerian culture has, until recently, given preference to men over women in most contexts, with men traditionally regarded as 'the pillars of the family'. Women would often be treated like less privileged society members, and consequently were not given the equal opportunity to acquire education and other forms of formal training (Lasiele, 1999). The early history of education in Nigeria indicates that females lacked easy access to formal education and the few that had education were not trained and employed in areas that could enhance their chances of competing for greater public positions (Ojob, 2008). In economic and workplace terms, few Nigerian women would engage in office and managerial jobs, with the majority working as petty traders or in traditional domestic roles. They were not provided with the opportunity to develop their potential skills and competencies to the fullest.

Attracting more women to serve on corporate boards requires them to have the requisite educational qualifications and skills that would enable them to perform their monitoring role effectively, however the study appears to indicate that these are lacking. This view is consistent with Hillman, Cannella and Harris (2002), who examined how the attributes of female and racial minority directors serving on Fortune 1000 boards differ from those of white males. They argue that, to be appointed to a directorship, the females and racial minorities may have to exhibit higher standards of ability or expertise than white males. They argue that for women and ethnic minorities, education is the key means by which they can secure widespread recognition for individual achievements and expertise, and that through education, they can publicly demonstrate that they have equal capabilities as their male counterparts. In the case of Nigeria, the problem that

mitigates women being effective board members may be better addressed by ensuring that they have equal access to education and opportunities.[26]

Using an alternative measure of diversity, the study however provides evidence of a positive and significant association between the presence of at least one female director on the corporate board and firm performance, implying that the greater the presence of female directors on the boards of Nigerian firms the better the firm performance. The finding suggests that the performance of Nigerian firms can be improved by ensuring that at least one female director is appointed to the corporate board. The finding provides support for hypothesis 9 and consistent with the agency theoretical prediction (Jensen and Merckling, 1976). The finding is also consistent with the institutional theory, which suggests in this case that, appointing at least a woman to the corporate board symbolises legitimacy (Selznick, 1957; Scott and Mayer, 1994; Hall & Taylor, 1996; Scott, 2008; It is consistent with prior literature e.g. Carter, Simkins and Simpson (2003) who investigate the relationship between the presence of women, African Americans, Asians, Hispanics and other minorities on boards and firm performance, and find a positive association between the presence of female directors and Tobin's Q. It is also consistent with other prior studies (e.g. Erhardt, Werbel, and Shrader, 2003; Labelle and Sinclair-Desgagne, 2008; Adams and Ferreira, 2009; Dezso and Ross, 2012; Aksu and Cetin, 2015, Ntim, 2015 etc)

The study investigates the resource dependence role of female and ethnic minority directors sitting on Nigerian corporate boards. The results of the analysis carried out reveal that the average percentage of Nigerian corporate boards members that were females in 2004 was just 4 per cent but the proportion has risen to 18 per cent in 2015. This suggest that the inclusion of women in corporate board membership is improving, as it has shifted the board profile from the

[26] Empowerment refers to the process of women becoming stronger and more confident, especially in controlling their life and claiming their rights.

traditional all male to more diverse boards. The reason being that the females are capable and are providing the firms with required resources they need. This finding is consistent with prior studies. For example, Daily, Certo and Dalton (1999) found that in Fortune 500 companies, there were 270 female directors (4.7%) in 1987 and by 1996 this had risen to a total of 417 (7.1%). Similarly, the average proportion of ethnic minority directors on the boards of companies listed on the Nigerian Stock Exchange increased from 11 per cent in 2004 to 27 per cent in 2015, although each of these trends experienced a few fluctuations during the period. This is also because the ethnic minority directors are adding value to the companies.

In analysing the resource dependence role of female directors, the study finds that 212 (38%) female directors serve on at least one of the four important board committees during the twelve-year period (2004-2015); and that during the period, 96 (17%) female directors hold higher degrees and possess professional qualifications, thus contributing to the firm's human capital development. Findings show that during the period, 108 (19%) of the female directors provide occupational support for the senior management in making strategic decisions; the findings also reveal that during the period, 65 (12%) female directors provide community-firm relations support in terms of serving as linkages to the environmental contingencies, providing non-business perspectives in resolving issues, etc. The analysis also shows that during the period, 80 (14%) female directors serve on other large corporate boards and thus bring a variety of experiences.

The analysis carried out with respect to the roles of ethnic minority directors reveals similar findings. The study finds that 172 (27%) ethnic minority directors who are current and former directors and senior officers of other corporations provide business expertise support for the firm. A further finding is that 182 (28%) minority directors provide specialized skills support to the firm especially in areas such as engineering, law, commercial and investment banking, accounting/finance, public relations and insurance. The study also finds that 158 (27%) of the

minority directors provide community-firm relations support for the firm. Besides the fact that they provide non-business perspectives for solving problems in the organization among others, the community-firm relations minority directors serve as bridges between the firms and their communities. More importantly, they help prevent and resolve conflicts and clashes between the companies and their host communities. As discussed earlier majority of the Niger-Delta ethnic minority directors often have good relationships with and can exercise influence over those powerful pressure and social groups in their communities. These directors thereby serve to provide links between the oil companies operating in the Niger-Delta region in Nigeria and their host communities. By so doing, they help reduce uncertainties and additional operating costs that arise from production disruptions. Nigeria is one of the world's exporters of crude oil. The Nigerian economy to a greater extent relies on oil and gas exploration, and the revenue from oil and gas contributes significantly to the total government revenue. The smooth or otherwise exploration of oil and gas in the Niger-Delta region is of great concern to the federal government of Nigeria as well as the Nigerian people. A cause of incessant conflict between the host communities and the multinational companies operating in the Niger-Delta is the environmental degradation caused by oil exploration and gas flaring. The intervention into the conflicts and mediation by some of the influential Niger-Delta indigenes on the boards of the companies operating in the region goes a long way to ease tension and unrest. This resource dependence role, as argued by Selznick (1965) reduces the firms' instability and the threat to their existence. Another finding is that 130 (20%) ethnic minority directors are insiders, and because they have the knowledge about the firm itself as well the expertise on business strategy and direction, these directors provide the board with the needed insider expertise support.

Given the above stated findings, the study shows that although female and ethnic minority directors bring legitimacy to the firm, their appointment to the board does however go beyond providing firms with legitimacy, as they also bring to the firm other valuable resources. Based on

the foregoing, the study demonstrates that the female and ethnic minority directors on Nigerian corporate boards must be valued and not seen as token members. These findings are consistent also with the institutional theory, as the appointment of females to the corporate board provides the firm with legitimacy.

The theoretical implication of these findings is that, the research on boards of directors is principally dominated by agency theory, as the directors are appointed to the board essentially to ratify management decisions and monitor their actions. The resource dependence roles of directors are theoretically different from their agency roles (Johnson, Daily, and Ellstrand, 1996; Hillman, Cannella, Jr, and Paetzold, 2000), although directors may perform both roles at the same time (Johnson, Daily, and Ellstrand, 1996). As mentioned earlier, the agency role of directors (often termed the control role of the board) is basically monitoring (Johnson, Daily, and Ellstrand, 1996), whereas the resource dependence role that directors perform is that of providing the firm with essential resources or securing them through linkages to the external environment (Pfeffer and Salancik, 1978; Zahra and Pearce, 1989). The common view in the corporate governance literature (e.g. Carter *et al*., 2010; Hillman, Cannella, Jr, and Paetzold, 2000) is that agency theory does not provide a clear-cut prediction of the relationship between gender and/or ethnic minority diversity and firm financial performance as much as the resource dependence theory does.

The female and Niger-Delta ethnic minority directors on the board of Nigerian companies bring resources to the firm such as higher qualifications, membership of top ranking professional bodies and serving on important board committees. In addition, the Niger-Delta ethnic minority directors provide a link between the companies in which they serve as board members and their host communities. All these, to a large extent, are expected to provide support for the positive relationship between women's and ethnic minorities' board membership and firm financial

performance. Therefore, it can be said that these findings are consistent with resource dependence theory.

It is important to mention that, in terms of the issue of gender, it appears that only those females that acquire formal education and professional experience and credentials could be appointed to the boards of companies in Nigeria. The analysis carried out shows that many possess higher degrees. Some have specialized expertise in areas such as engineering, law, medicine, etc. They have recognized achievements in their respective professional areas such as winning the Nobel Prize in medicine or literature. There are many instances where women are appointed to the board because of the professional advice they can provide to the firm. The human capital role of Nigerian females includes the stock of their education, skills and experiences. In summary, all these are expected to account for the positive relationship between female board membership and firm performance. Thus, the findings in the study are also consistent with the human capital theory.

The finding that female directors and Niger-Delta ethnic minority directors on Nigerian corporate boards are valuable and not token members of the board is consistent with the resource dependence theory, as they bring to the board not only legitimacy but also provide the firm with valuable resources. The inclusion of females and ethnic minorities provides the firm with legitimacy. Therefore, the results are also consistent with institutional theory.

The findings in this study also have policy implications. It has been established empirically that the directors bring critical resources to the firm such as legitimacy, experience, knowledge and links to important elements in the firm's external environment (Pfeffer and Salancik, 1978). One of the evidence provided in the study is that appointing ethnic minority directors onto the board will enhance firm performance. This is in line with resource dependence theory and implies that the rationale behind such appointments is also economically motivated. However, where the reason for appointing ethnic minority directors onto the board is politically

motivated, this may have a detrimental impact on performance on a long-term. The policy makers therefore should always take into consideration the implications for performance of the legislation (or regulations) guiding the appointment of the directors on to the board. Should it be based on business case or for political reasons. This is because some countries have laws that stipulate the number or proportion of the board members that must be female or ethnic minority[27].

Findings of the study also have implication for corporate decision makers (top managers and the board). It is good corporate governance practice to have a committee with the responsibility of nominating and selecting the directors, i.e., the Board Nomination Committee, comprised mainly of non-executive directors. The main responsibility of the committee is to make recommendations to the board on candidates to be appointed as director, based on the set guidelines. Another result in the study reveals a negatively significant relationship between one or more ethnic minority director on the board and performance. The negative result might have arisen because the rationale for appointing such director(s) was based on social pressure or a quota rather than economic factors. The board nomination committee and eventually the board must be aware of the implications for firm performance when ratifying decisions for appointing directors to the board.

Findings in the study have implications for investors. The equity investors are the residual claimants and therefore also need to be aware of the implications for firm performance of appointing directors (i.e. women and or ethnic minority directors) on to the board. Is based on whether such directors are considered to be valued members that will bring resources to the firm, or that they are appointed to the board for political reasons. This awareness would guard them against making wrong investment decisions.

[27] For example, Norway has a law requiring 40 per cent of the board members of a firm to be women (Rose, 2007).

8.5. Robustness Test

The only robustness test carried out is to confirm the validity of the moment conditions used in the dynamic panel-data models of Arellano-Bond and Arellano-Bover/Blundell-Bond. In doing this, the study performs tests for AR (1) and AR (2) for first-order and second-order serial correlation in the first-differenced residual, under the null hypothesis of no serial correlation in the first-differenced errors. The tests show that the moment conditions used by xtabond and xtdpd are valid and that the models are not misspecified.

8.6. Summary

In this chapter, the study examines the roles of the female and Niger-Delta ethnic minority directors on the corporate boards of the Nigerian listed firms. The study estimates the relationship between the female and the ethnic minority presence on the board and/or board membership and firm financial performance, using alternative techniques for the estimations. It examines the resource dependence roles of the females and Niger-Delta ethnic minority directors on the boards of Nigerian listed firms. The study discusses the findings, shows the implications of the results, discusses the limitations and makes recommendations based on the findings.

CHAPTER NINE: SUMMARY AND CONCLUSION

9.1. Introduction

This chapter provides a summary of the study, a discussion of the contributions, conclusion, limitations and recommendations. It also provides an insight into areas that require further research in the future.

9.2. Summary

In the study, the researcher investigates the impact of independent boards on firm performance. The board is an important governing mechanism for resolving agency problems between the management and shareholders. It has the power to hire and fire top executive management and ensure they are adequately remunerated. The board has responsibility for ratifying important decisions in the firm and monitoring the executive management (Fama and Jensen, 1983). An important part of the board responsibility is to formulate the firm's strategy, set its direction and ensure good corporate governance in the firm (SEC code, 2011).

The board functions and carries out some of its responsibilities through committees. Appointment to the board is by written, clearly defined, formal and transparent procedures. When directors are appointed, they undergo a formal orientation and receive training both at the inception and on-going. In addition, the board establishes and undertakes a formal and rigorous annual evaluation of performance for every director and its committees. The director's retirement from the board is by rotation. Subject to satisfactory performance and the provisions of the firm's Article of Association and of the Companies and Allied Matters Act (2004), all directors must submit themselves for re-election at regular intervals of at least once every three years (SEC code, 2011). Every company in Nigeria is required to hold a board meeting at least once every quarter and every director is required to attend at least two-thirds of all board meetings. Such attendance is part of the criteria for the re-nomination of the directors (SEC code, 2011).

The board of a typical Nigerian company comprises a mixture of both executive and non-executive directors, and is normally headed by a chairman. Data on the sampled firms show that average board size is nine. The Nigerian corporate governance code requires that the board should be of a sufficient size relative to the scale and complexity of the firm's operations and be comprised in such a way that ensures diversity and experience without compromising independence, compatibility, integrity and availability of members to attend meetings. Although the code does not specify the maximum number of the directors that should be on a board, it does however require that the board should not comprise less than five directors.

Regarding the composition of the boards, the corporate governance code requires that most board members should be non-executive directors and at least one of who should be independent. Findings reveal significant compliance with this requirement of the code, as the average board size is nine directors and the average number of non-executive directors is six. The average proportion of independent directors on Nigerian corporate boards is about 19 per cent. Non-executive directors are generally considered as outsider directors. However, in the study, a distinction is made between three classes of outsider directors; each class is considered in relation to the level of independence that comes with it. A non-executive director may have one or other of these relationships with the firm or its management. For example, where a non-executive director also provides services to the firm in his/her capacity as a professional (e.g., an investment banker or solicitor to the firm), this is referred to as a grey director. There are some non-executive directors who although do not have contractual relationship with the firm or management but are not independent of them. This category, is referred to as non-independent outsider directors. Where a non-executive director has no other relationship with the firm or its management except for his/her directorship in the firm, this is referred to as an independent non-executive director. Since the level of independence that comes with independent non-executive directorship is the highest

among the three categories of outsider directors examined, an independent director is defined as an independent non-executive director within this study.

For most companies that are listed on the Nigerian Stock Exchange, the positions of the chairman of the board and chief executive officer (CEO) are separate and held by different individuals. This approach prevents an over-concentration of power and ensures there are check and balances for the board in the discharge of its responsibilities. The chairmen of Nigerian corporate boards are usually non-executive directors, but there are several instances where they are also their CEOs (i.e. the executive chairmen).

As part of their efforts to ensure good corporate governance practices, the boards of Nigerian companies have begun to implement some laudable policies that may assist in strengthening their corporate governance practices and thus bring corporate governance practices closer to an internationally acceptable standard. For example, the study notes a significant improvement in corporate governance practices such as a substantial rise in the number of companies that implement and make disclosure on policies relating to anti-corruption, insider-trading, whistle-blowing, shareholder complaints management, the board or individual director's real (or potential) conflicts of interest and shareholders' rights. There is an awareness that the environment in which the firm carries out business does have an influence on firms' operations and by default on their corporate governance practices. In reviewing corporate governance practices in Nigeria, the study therefore makes an attempt to investigate the impact of the institutional environment on firm-level corporate governance.

The context of the study, Nigeria, is a multi-ethnic and cultural society. The culture of the Nigerian people, their value system and beliefs including stereotypes around gender and ethnicity have an influence on the quality of the board's monitoring. In Nigerian society, gender and

ethnicity[28] are significant issues socially, politically and economically. The study therefore examines the gender and ethnic diversity of Nigerian corporate boards and the findings reveal interesting results about their impact on the performance of firms.

Firm ownership structure is also an important corporate governance mechanism for resolving agency problems. The impact of a governance mechanism on firm performance may depend upon the firm's ownership structure. Findings in the study reveal that Nigerian firms are highly concentrated. The ownership of an average firm in Nigeria is about 71 per cent concentrated. Findings show that most large Nigerian companies started as owner-managed firms. Many ended up being controlled substantially by the founding shareholder. Findings also suggest that high ownership concentration in Nigerian corporations is mainly due to a lack of adequate protection for the minority investors (see Appendix 11 & 12). The study thus investigates the institutional and large non-institutional ownership and their impact on performance. It also examines whether the Nigerian companies' ownership structure affects decisions on board independence. The study investigates the executive directors' and non-executive directors' ownership in relation to performance. Findings reveal that a greater percentage of the ownership stake by the executive management is held by the CEO, and a smaller proportion is owned by other executive directors. Finding reveals that the equity ownership by the firm's executive directors does not have an alignment influence on firm performance.

The study investigates the relationship between institutional ownership and performance. At present, institutional ownership is gradually developing in Nigeria. A larger proportion of this ownership is by blockholders such as insurance companies, pension management companies, security companies, investment bankers and other financial institutions. The study shows that

[28] The principle based on ethnicity is usually referred to as 'federal character'. It is a common practice by the Federal government in Nigeria to allocate resources to the state and local governments based on the principle of federal character.

institutional ownership in the Nigerian context appears not provide support for firms' improved performance. Ownership by institutional investors in Nigeria has only recently begun to evolve and all it requires for now is encouragement by policy makers.

The study also examines non-executive directors' ownership in relation to firm performance. Findings reveal that although the outsider directors on the Nigerian corporate boards are non-executive directors, a greater percentage of them could not be categorised as independent directors, partly because they hold more than 0.1 per cent of the firm's equity shares and because they are not independent of the management. However, only the equity ownership by non-executive directors on Nigerian boards appears to have the alignment (incentive) effects as ideally expected.

9.3. Contributions

Some important contributions that emerge from this research are discussed below. In the first empirical chapter, the study examines role of independent directors in relation to firm performance. It provides evidence that the presence of outside directors on the corporate board matters for improving corporate performance. The implication of this for the shareholders' value is that, the companies' performance and thus shareholders' wealth can be enhanced by increasing the proportion of outsider directors on the corporate boards. This may be accomplished either by encouraging the shareholders to appoint more of the outsider directors to the companies' boards or by regulatory process (e.g. prescribing through the provisions of the corporate governance code the proportion the board that should be comprised by outside directors).

The chapter goes beyond this point as it further investigates the impact of ownership structure on board independence. Finding in the study reveals an insignificantly negative relationship between a concentrated ownership and board independence. Implying that ownership

structure does not affect decisions on board independence; a finding, not consistent with agency theory. Because, from the agency theory perspective, as the blockholders' equity stake in the firm increases, they may engage in rent extraction for their private interests; thus, the blockholders are not likely to be supportive of the move to have independent board, as this may possibly limit their control of the firm. The finding by the study is also not consistent with prior literature (e.g. Kim, Kitsabunnarat-Chatjuhamard and Nofsinger, 2007; Satia-Atmaja, 2009) that find negative relationship between ownership concentration and board independence. This study extends the literature, by providing evidence that is different from those of prior studies and which as well inconsistent with the theory.

Furthermore, this chapter examines the moderation effect of ownership concentration on the relationship between board independence and firm performance. Finding in the chapter, reveals that the coefficient on the interaction term between board independence and ownership concentration is positive and significant when the measure of performance is Tobin's Q. Implying that the relationship between board independence and firm market performance is moderated. The chapter reveals similar finding when the accounting measure of performance is used. In the chapter, the study provides evidence that the performance impact of board independence, is greater in closely-held firms than the widely-held when the measure of performance is the market measure and vice-versa when the measure of performance is the accounting measure. These findings suggest that, the performance impact of board independence differs between closely-held and widely-held firms.

The theoretical/academic implication of these results is that the impact of governance mechanisms (e.g. board independence) on firm performance is moderated by companies' ownership structure (e.g. concentrated ownership). The findings signify the important governance role that independent boards can play in the company's corporate governance. The

practitioner/policy implication of the findings is that, it reinforces the idea that, the independent directors can also play key role in the corporate governance of closely-held firms. Thus, the study extends empirical literature on the important governance role that independent boards can play in the companies' corporate governance, in a developing economy, characterised by high ownership concentration, and coupled with a high level of private benefits of control. With these empirical findings, the study extends research on the effectiveness of governance mechanisms.

In the second empirical chapter, the study investigates the relationship between ownership structure and firm performance, making attempt to seek which form of ownership really drives the business of the Nigerian firms. First, in line with the agency theory, the interests of the managers can be aligned with those of the shareholders by providing the managers with equity incentives. The theory suggests, this will make the managers to be more committed to the job and work towards realization of the value maximization objective of the shareholders. Finding in the chapter reveals, a negative and significant association between the executive directors' ownership and firm performance. The study extends the literature as the finding suggests that, in contrast to agency theoretical position, ownership by the executive directors does not produce the alignment effects as predicted by the theory (Jensen and Meckling, 1976) and thus will not improve firm performance.

Second, regarding the relationship between ownership by the blockholders and firm performance. The study splits large ownership into institutional and non-institutional. A widely-held opinion in the corporate governance literature is that the institutional investors, often being the blockholders, a priori are effective monitors. This is based on the premise that, institutional investors do invest large, and as such will have the means and incentive to collect information to monitor the management. The expectation therefore is that, the institutional investors would be willing to be actively involved in the corporate governance of the firm in which they invest.

Finding reveals, there is negative and significant relationship between institutional ownership and form performance. This result, suggests that institutional investors are passive investors.

Third, similarly, a common opinion is that non-institutional blockholders can make use of their influence especially when they have significant controlling interest, to ensure sound corporate governance practices in the firm. Finding reveals a negative and significant relationship between ownership by non-institutional blockholders and firm performance. The finding suggests that non-institutional blockholders are not effective monitors.

Lastly, the ownership by the non-executive directors in relation to firm performance is investigated. Finding however, indicates there is positive and significant relationship between this form of ownership and firm performance. The study extends the literature as the theoretical implication for these findings is that none of these findings about ownership-performance relationship is consistent with the agency theory, except for ownership by non-executive directors.

The study extends the literature by providing evidence in contrast to agency theory prediction and common opinion in the literature that ownership by the institutional and non-institutional blockholders improves firm performance. However, the study also contributes to literature by providing empirical evidence that aside being outside directors, the non-executive directors can be effective monitors if they are provided with equity incentive (i.e. to hold equity shares in the firm) as against reliance solely on concern for their reputation as argued by some researchers (e.g. Fama and Jensen (1983). In contrast to evidence provided in most prior studies (e.g. Morck, Shleifer and Vishny, 1988; Monks and Minow, 2004 etc.) the study extends the literature by providing evidence that no other forms of ownership drive the companies' business, except for ownership by the non-executive directors

In the third empirical chapter, the study investigates the relationship between gender and ethnic minority diversity and firm performance. To the best of the knowledge of the researcher, this is the first comprehensive empirical study that investigates simultaneously both the resource dependence and agency roles of the females and ethnic minority directors sitting on Nigerian corporate boards.

First, this chapter investigates their agency roles. Findings in the chapter reveal a significant and positive association between the ethnic minorities' representation on the board and Tobin's Q. These results suggest that, the ethnic minority directors are effective monitors. However, the relationship between the females' representation and firm accounting performance is negative and significant. This could be because, attracting more women to serve on corporate boards requires of them to have requisite educational qualifications and skills, these which they possess, however, perhaps not sufficient. The results could also be because, the proportion of female directors on the corporate boards is inadequate (i.e. yearly average is about 11 per cent. See Table 8.1) to bring about effective monitoring. Nevertheless, using alternative measure of diversity, finding reveals however, a positive and significant relationship between the females' presence and firm performance.

Second, the chapter investigates their resource dependence role. Findings reveal that, female directors serve on at least one of the four important board committees; they hold higher degrees and professional qualifications and thus contribute to firms' human capital development. Some of them provide occupational support to the senior management for making strategic decisions; they provide community-firm relations support to the firm and thus provide non-business perspectives for resolving issues. Finding reveals that, female directors also bring to the board a variety of experiences because they serve on the boards of other large companies. This finding is consistent with the resource dependence theory (Pfeffer and Salancik, 1978)

The chapter also reveals similar findings with respect to the role of ethnic minority directors. The ethnic minority directors sitting on the Nigerian corporate boards similarly provide the firm with a variety of resources. For example, findings show that, those who are current directors in the company or those former officers of the company have business expertise and specialized skills with which they provide to support the firm; the ethnic minority directors provide firm with community-firm relations support, as they provide linkages between the firm and host communities, thereby help to reduce firms' instability and threat to their existence. Because of their knowledge of the firm, some of ethnic minority directors provide insider-expertise support on business strategy and direction. Both the female and ethnic minority directors on the Nigerian corporate boards provide the firm with legitimacy. Findings reveal a rising trend in the female and ethnic minority directors' participation in the resource provisions to the firm over the 12-year period (see Tables 8.12; 8.13 & Figure 8.3) and because of their contributions, more of the female and ethnic minority directors are now being appointed to the corporate boards.

The theoretical implication of these findings is that, the resource dependence roles of the directors are theoretically different from their agency roles, although the directors perform both roles (Johnson et al., 1996). The finding of positive and significant relationship between ethnic minority directors' board representation and firm performance is consistent with prediction of the resource dependence theory, but the finding of negative and significant association between the female directors' board representation and performance is not. Similarly, the finding of a positive and significant association between the females' presence on the corporate board and firm performance is consistent with the prediction of the resource dependence theory. This is because a common view in the corporate governance literature is that, agency theory does not provide a clear prediction of the link between board diversity and firm performance as much as the resource dependence theory does (Carter et al., 2010). An earlier mentioned finding in the chapter, that reveals a positive and significant relationship between the representation of ethnic minority

directors on the board and firm performance, as well as the finding of a positive and significant association between the females' presence on the board and firm performance, are both viewed as being consistent with the agency theory. This is because, diversity increases the board independence (Carter, Simkins and Simpson, 2003) and that agency theory offers the possibility that, diverse directors may also be better monitors of the management.

The policy implication is that, the regulators must take into consideration the implications for firm's performance of the regulations (legislations) that, guide the appointment of directors onto the corporate boards. This is because, in some countries, it is usually stipulated in their laws the proportion of the board members that should be females or ethnic minority. Furthermore, the board's nomination committee whose responsibility is to screen the nomination of potential directors and the shareholders who eventually ratify the nomination of appointed directors should be aware of the implications for performance of the directors' appointment onto the board, especially when appointment is based upon a political rather economic rationale.

The empirical findings in this study reveal that the females and minority directors bring important resources to the board beyond gender and ethnicity. These findings fail to reinforce the long-age stereotype about and discrimination against the females. They suggest that the females are also valuable members of the corporate board like their male counterparts. Therefore, given the institutional context of this study, these findings extend the literature on gender and ethnic minority diversity-firm performance study.

9.4. Conclusion

The study adds to the growing literature on various aspects of the board and ownership structures examined. Most of the findings are consistent with the underlying theoretical positions and prior literature, while a few findings deviate from them. The deviations may be due to

institutional context of the Nigerian listed firms. One of the reasons for inconsistency of findings with the theory and with those of prior studies, may be due to differences in institutional contexts of the companies being examined. The institutional context, differs from one county to another, and may moderate the outcome of corporate governance investigations (Zattoni et al., 2017; Filatotchev, Jackson and Nakajima, 2013; Claessens and Yurtoglu, 2013; Aguilera, 2005). In this study, a review of corporate governance practices in Nigeria is carried out (section 2.1 to 2.3), the study notes that, the institutional environment of Nigerian firms is characterised notably by endemic corruption and weak legal/judicial system among other factors. The consequential effect of this is that, Nigerian companies are not adequately supported by the relevant institutions. For example, corruption is largely left unchecked and the legal/judicial system remains weak since over the years.

This, phenomenon has economic implication for the investors as they would not be willing to invest in such an economy where corruption has become the norms; leading to companies operating not only at higher operating costs but with huge uncertainty that arises from inefficiency of the existing institutions. It also has implications for the policy makers such as those in the government and including the regulatory bodies. They must ensure that, adequate and relevant regulations are put in place, coupled with effective enforcement mechanism to safeguard the existing and potential investors, and the general-public from losing investment funds. Furthermore, the firms themselves are faced with the challenge of how to respond appropriately to such institutional issues, perhaps by adjusting the composition of their boards to enable the board take quality decisions. The company's policy makers and/or the board should see the need to put in place anti-corruption policies, including whistle blowing policies and ensure that these policies are adhered to. The current state of corporate governance in Nigeria also has the academic/theoretical implications, as the future Nigerian corporate governance researchers would need to adopt a multi-theoretical approach in their corporate governance investigations. For

example, because these corporate governance issues are macro-economic and externally to the Nigerian firms, it is arguable that, regardless of how sound governance mechanisms may be, the strength of firm's institutional environment may undermine their effectiveness. In the opinion of the researcher, it may not be out of place to argue that, the effectiveness of a governance mechanism is conditional upon the effectiveness of the firm's institutional environment.

9.5. Areas of further research

One of the major challenges inhibiting good corporate governance practices in Nigeria is a lack of regulation enforcement. Although part of this problem could be due to weakness in the legal/ judicial system of the nation. This aspect of corporate governance needs to be properly researched in the future. Several prior corporate governance studies (e.g. Ahunwa, 2002; Okpara, 2011; Adegbite, 2012) have pointed out that Nigerian corporate governance practices lack effective mechanisms that ensure compliance with the statutory regulations and compliance with the corporate governance code.

Regarding the gender and ethnic minority role on the corporate board, further research is required in certain aspects such as the role of those female directors who are also ethnic minority and investigation of whether the female board members who have family ties with controlling shareholders and/or management could have a significant effect on firm performance. Besides, gender and ethnic minority, diversity may be investigated with more consideration for institutional context of the investigation.

With respect to investigation on ownership structure, although ownership by institutional investors throughout the world is becoming more relevant and attracting attention, their role in corporate governance particularly in emerging markets is not clear and requires greater understanding. There may be the need for investigating the institutional ownership specifically by

its ownership types such as: the pension, banks, insurance firms; hedge funds etc rather investigating its impacts as a single mechanism. This approach will provide a better and deeper understanding as to which ownership type really makes what impact. Family ownership is predominant in many sectors in emerging economies, and raises a wide range of corporate governance issues relating to liquidity, transition to a more widely-held corporation, intra-family disputes with respect to issues such as succession, exploitation of family members and rivalry. There may be the need to investigate family ownership separately rather than being investigated as part of the concentrated ownership, and more importantly as this ownership type is highly predominant in the developing and emerging economies relatively to its presence in the market economies. Meanwhile, the state-owned firms have specific corporate governance issues relating to privatization, commercialization, and undue state interference. More research is also required in this regard in the future.

This study examines the impacts of corporate governance mechanisms on firm performance using a single African country data. Attempt should be made in carrying out future research to make use of data from a cross-section of African stock markets. This approach will improve the current understanding of the internal corporate governance-financial performance relationship across different African stock market.

In this study, the association between the internal corporate governance structure and firm financial performance is examined. Future research can be focused on how the external corporate governance mechanisms such as the market for corporate control, the managerial labour market and the law affect the firm performance.

As there is a growing trend in recent time of corporate organizations that have financial crises ironically tend to pay huge benefits and bonuses to their CEOs and directors, it would be

interesting if future research could investigate the relationship between the directors (CEO, executive and non-executive directors) pay and firm performance.

9.6. Limitations

In the process of conducting this research, the researcher faces many challenges, some of which result to limitations of the studies. These limitations are discussed as follows:

The study uses hand-collected dataset. Data used for the corporate governance variables were extracted manually from both hard and soft copies of the companies' annual reports. The accuracy of these variables is therefore subject to human errors during both the data extraction process and computations. To overcome this potential problem, the researcher painstakingly and diligently carried out the data extraction and computations before putting them into use.

Most of the potential limitations regarding sample selection procedure and size have been discussed in section 5.1. The study's sample size of 130 firms is relatively small. However, this sample size can be considered larger if compared with sample size of most Nigerian studies (e.g. Sanda, Mikailu and Garba, 2005; Kajola, 2008; Ujunwa, 2012; Tsegba and Herbert, 2013). For example, Sanda, Mikailu and Garba (2005) who investigate the impact of corporate governance mechanisms on the financial performance of Nigerian listed firms selected 93 firms as sample for the study. Kajola (2008) uses 20 Nigerian publicly listed firms as sample for investigating the corporate governance and firm performance in Nigeria. Ujunwa (2012) who examines the board characteristics and financial performance of Nigerian quoted firms uses 122 sampled firms. Tsegba and Herbert (2013) examine corporate governance, ownership structure and firm performance of

the Nigerian listed firms using 72 sampled firms. The use of 130 firm in this study may be a limitation, as sample size influences the performance outcome of an investigation.

The study also makes use of the financial data. This was obtained from databases such as Compustat, Datastream, the Nigerian Stock Exchange Database and from sources such as annual reports that were downloaded from the company's websites and a few were extracted from the hard copies of the annual reports obtained from the Nigerian stock exchange library. However, with respect to certain years, a few relevant data were neither available at the databases nor in the reports. The unavailability of these data causes missing data problems, which in turn reduces the number of years' observations. As a result, the study makes use of unbalanced panel data for its estimations. In overcoming this problem, the study makes use of appropriate STATA commands designed to handle missing data and this helps to minimise the bias effects that this might have on the regression results.

On some occasions, relevant data were not available, and it was difficult to capture the desired information in such circumstances. To overcome this challenge, the study makes use of alternative measures commonly used in corporate governance literature, especially by the previous research to proxy for the desired variable. However, the use of proxies may not serve as perfect substitutes for the desired variables when the relevant data is not available, and this could very challenging.

In carrying out analysis on corporate governance and firm financial performance, the study considers only the impacts of internal governing mechanisms such as the independence of the boards of directors, ownership by the executive directors, non-executive directors, institutional and non-institutional investors in its analysis. It does not however consider external mechanisms such as the managerial labour market or takeover bids, due to an unavailability of data. The

performance impact of corporate governance using these external governing mechanisms might produce different results.

The study uses more than one estimation technique for estimating its models. This approach on the one hand helps in checking the robustness of the analysis, however on the other hand it may produce conflicting results. To overcome the challenge, the researcher makes use of additional explanations to ensure clarity and justification for such results.

The study makes use of corporate governance data collected from the annual reports of the firms listed on the Nigerian Stock Exchange. This information could have been cross-checked with other sources of data such as questionnaire survey and perhaps face-to-face interview. However, the Companies and Allied Matters Acts (2004) and the NSE Listing Rules require companies to issue the annual reports. Researchers have argued that the mandatory nature of annual reports make them a regular and reliable sources of corporate governance information (e.g. Lang and Lundholm, 1993; Botosan, 1997). The collection and use of corporate governance data from the annual reports are also in conformity with prior studies (e.g. Sanda, Mikailu and Garba, 2005; Satia-Atmaja, 2009; Munisi and Randoy, 2013; Liu et al., 2015).

9.7. Recommendations

One of the findings with respect to independent board-performance relationship investigation, is a positive and significant association between the proportion of independent directors on the corporate board and firm performance. This finding suggests that Nigerian firms may improve their performance by increasing the proportion of independent directors on their boards. The Nigerian corporate governance code (SEC code, 2011) requires all companies listed on the Nigerian Stock Exchange to have on their boards at least one independent director.

However, given the evidence provided by this study, it is recommended that every company should have a board that is constituted exclusively by most independent directors, the compliance with which should be made mandatory.

Firms in Nigeria, like those in other emerging economies, lack the institutional support they require to operate efficiently and effectively. Besides, most of the recent studies on corporate governance in the emerging economies argue that, national institutions have impacts on firm-level corporate governance; thus, they increasingly emphasise the need to take into consideration, the firm's institutional context in the board and ownership-performance research. Given its importance in the emerging market's corporate governance research, the study recommends that future research should hence take the firm's institutional context into consideration in their corporate governance future research.

The study provides evidence consistent with the theoretical position that women and ethnic minorities appointed to the board bring those critical resources that the firm requires and provide it with links to such resources. Evidence provided in the study also suggests that, females on the board are valued members and not just a token. Given this evidence, it will be recommended that the appointment of women and ethnic minorities to the board should be driven by economic considerations rather than for social or ethical reasons.

The study also provides evidence that there is a positive and significant association between ethnic minority board membership and firm performance, which suggests that firms can enhance their performance by increasing the proportion of ethnic minorities on the board. Therefore, it will be recommended that Nigerian firms should endeavour to increase the proportion of ethnic minority directors on their boards.

The study investigates the impact of ownership on firm performance. Finding reveals that only the non-executive ownership has a significantly positive relationship with firm performance. Because, finding suggests that the firm's performance improves as the non-executive directors' ownership rises. It is therefore recommended that the non-executive directors should be provided with equity incentives and be encouraged to hold more shares in the firm.

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Appendix

Table 1.0
Estimations of the Relationship Between Board Independence and Ownership Concentration

Variable	(OLS)	GLS	GMM-Diff	GMM-System
Closely_held	-0.00	0.05	-0.34	-0.14
	(-0.05)	(1.75)	(-1.43)	(-1.47)
CEO_Tenure	-0.02***	-0.01**	-0.02	-0.02
	(-2.74)	(-2.42)	(-1.56)	(-2.34)
Firm Size	0.01***	0.01	-0.03	-0.01
	(3.98)	(1.35)	(-1.79)	(-0.84)
Leverage	-0.10	0.00	0.02	0.00
	(-0.46)	(0.16)	(0.48)	(0.05)
Board Size	-0.03	-0.05	-0.04	-0.04
	(-2.45)	(-3.13)	(-1.12)	(-0.99)
Profitability	-0.01	-0.01	-0.03	-0.00
	(-0.61)	(-0.51)	(-0.34)	(-0.00)
Investment	0.00	0.00	0.04	0.09
	(0.02)	(0.10)	(0.65)	(1.45)

Growth Opportunity	0.00	0.00	0.00	0.00
	(0.39)	(0.12)	(0.52)	(0.26)
CEO_Duality	-0.03	-0.05	-0.05	-0.04
	(-1.54)	(-2.18)	(-1.01)	(-0.87)
Constant	0.18	0.21	0.69	0.43**
	(3.67)	(4.01)	(2.14)	(2.28)
Industry Dummy	Included	Included	Included	Included
Year Dummy	Included	Included	Included	Included
R-Squared	0.096	0.0604		
Adj R-Squared	0.0538			
Observation	516	516	214	298
F Value	2.27			
P Value	0.0538			
Wald chi2		44.54	26.54	39.55
Prob > chi2		0.0045	0.2293	0.0431

Notes: This table reports results of regressions of the relationship between Ownership Concentration and Board Independence. The regression coefficients are reported with the associated t-values (or z-values) in parenthesis. The significance level is described as follow: *** indicates p < 0.01; ** indicates p < 0.05; * indicates p < 0.10

Appendix 1: Estimation of the Relationship Between Board Independence and Firm Performance

Table 2.0
Estimation of the Relationship Between Executive Directors' Ownership and Firm Performance

Dependent Variable: Tobin's Q	**Ord. Least Squares**	**Random Effect**	**Arellano -Bond**	**Arellano - Bover/Blundell -Bond**
Variable	**(OLS)**	**GLS**	**GMM-Diff**	**GMM-System**
Executive Directors' Ownership	-2.75	-0.35	-1.86	-1.72
	(-1.25)	(-0.18)	(-0.19)	(-0.19)
Firm Size	-0.23	-0.20	2.13	-0.51
	(-1.28)	(-0.69)	(1.05)	(-0.82)
Leverage	1.89	0.04	-2.16	-1.62
	(1.34)	(0.04)	(-0.89)	(-0.62)
Dividend	0.27	-0.01	1.11	-0.35
	(0.15)	(-0.01)	(0.28)	(-0.10)
Investments	-0.16	-0.43	-0.49	0.97
	(-0.05)	(-0.17)	(-0.11)	(0.17)
Cash Flow	-0.02	0.02	2.53	-0.09

	(-0.09)	(0.13)	(0.55)	(-0.05)
Growth Opportunity	-0.00	-0.00	0.00	-0.00
	(-0.18)	(0.02)	(0.00)	(-0.09)
Tangible Assets/Sales Ratio	-0.41	-0.10	-0.11	-0.09
	(-1.24)	(-0.39)	(-0.19)	(-0.14)
Tobin's Q (t-1)			0.09	0.66***
			(0.91)	(13.01)
Constant	4.06**	3.56	-18.56	4.86
	(2.22)	(1.30)	(-0.97)	(0.84)
Industry Dummy	Included	Included	Included	Included
Year Dummy	Included	Included	Included	Included
R-Square	0.0373	0.0236		
F Value	0.97			
P Value	0.50			
Wald chi 2		21.04	19.71	209.73
Prob > chi2		0.28	0.41	0.00
AR (1) test (*p-value*)			0.25	0.28
AR (2) test (*p-value*)			0.24	0.28
Observations	469	469	279	410

Notes: This table reports the result of regression of the relationship between firm performance and ownership structure. The regression coefficients are reported with the associated t-values (or z-values) in parenthesis. The significance level is described as follows: * significant at the 0.10 level; ** significant at the 0.05 level; *** significant at the 0.01 level.

Appendix 2: Estimation of the Relationship Between Executive Directors' Ownership and Firm Performance

Table 3.0
Estimation of the Relationship Between Executive Directors' Ownership and Firm Performance

Dependent Variable: ROA	**Ord. Least Squares**	**Random Effect**	**Arellano - Bond**	**Arellano - Bover/Blundell -Bond**
Variable	**(OLS)**	**GLS**	**GMM-Diff**	**GMM-System**
Executive Directors' Ownership	-0.08**	-0.07**	0.09	-0.03
	(-2.41)	(-1.96)	(0.91)	(-0.38)
Firm Size	0.01***	0.01***	-0.07***	0.00
	(4.62)	(2.85)	(-3.63)	(1.10)

Leverage	-0.09***	-0.07***	0.02	-0.04*
	(-4.35)	(-2.96)	(0.72)	(-1.80)
Dividend	0.08***	0.05**	0.04	0.02
	(3.11)	(1.96)	(1.04)	(0.68)
Investments	0.16***	0.12**	-0.03	-0.04
	(2.98)	(2.36)	(-0.54)	(-0.95)
Cash Flow	0.00	0.00	0.13***	0.06***
	(0.88)	(1.08)	(2.80)	(3.45)
Growth Opportunity	-0.00	-0.00	-0.00	-0.00
	(-0.64)	(-0.47)	(-0.72)	(-0.83)
Tangible Assets/Sales Ratio	-0.01***	-0.01*	0.00	0.00
	(-2.71)	(-1.87)	(0.09)	(0.65)
ROA (t-1)			0.32***	0.34***
			(5.75)	(8.89)
Constant	0.03	0.04	0.74***	0.04
	(1.15)	(1.22)	(3.87)	(0.91)
Industry Dummy	Included	Included	Included	Included
Year Dummy	Included	Included	Included	Included
R-Square	0.171	0.1659		
F Value	5.14			
P Value	0.00			
Wald chi 2		52.59	101.78	186.27
Prob > chi2		0.00	0.00	0.00
AR (1) test (*p-value*)			0.19	0.09
AR (2) test (*p-value*)			0.88	0.38
Observations	468	468	272	410

Notes: This table reports the result of regression of the relationship between firm performance and ownership structure. The regression coefficients are reported with the associated t-values (or z-values) in parenthesis. The significance level is described as follows:* significant at the 0.10 level; ** significant at the 0.05 level; *** significant at the 0.01 level.

Appendix 2 (a): Estimation of the Relationship Between Executive Directors' Ownership and Firm Performance

Table 4.0

Estimation of the Relationship Between Non-Executive Directors' Ownership and Firm Performance

Dependent Variable: Tobin's Q	**Ord. Least Squares**	**Random Effect**	**Arellano - Bond**	**Arellano - Bover/Blundell-Bond**
Variable	**(OLS)**	**GLS**	**GMM-Diff**	**GMM-System**
Non-Executive Director Ownership	-2.09	-0.93	-7.95**	-12.96***
	(-1.23)	(-0.65)	(-3.04)	(-3.31)
Firm Size	-0.23	-0.23	0.09	0.69
	(-1.28)	(-0.78)	(0.10)	(-1.43)
Leverage	1.84	-0.06	-0.81	-1.48
	(1.29)	(-0.05)	(-0.62)	(-0.65)
Dividend	-0.04	0.01	1.03	0.49
	(-0.02)	(0.00)	(0.58)	(0.15)
Investments	-0.20	-0.65	-2.12	0.44
	(-0.06)	(-0.25)	(-0.85)	(0.09)
Cash Flow	-0.03	0.01	1.97	-0.09
	(-0.11)	(0.07)	(0.84)	(-0.06)
Growth Opportunity	-0.00	-0.00	0.00	-0.00
	(-0.32)	(0.00)	(-0.03)	(-0.16)
Tangible Assets/Sales Ratio	-0.44	-0.10	-0.06	-0.06
	(-1.28)	(-0.38)	(-0.21)	(-0.10)
Tobin's Q (t-1)				0.65***
				(16.18)
Constant	4.19**	3.88	1.19	6.95
	(2.24)	(1.42)	(0.13)	(1.52)
Industry Dummy	Included	Included	Included	Included
Year Dummy	Included	Included	Included	Included
R-Square	0.0364	0.0232		
F Value	0.93			
P Value	0.54			
Wald chi 2		21.58	27.64	315.90
Prob > chi2		0.25	0.09	0.00
AR (1) test (*p-value*)			0.17	0.22
AR (2) test (*p-value*)			0.25	0.23
Observations	463	463	270	397

Notes: This table reports the result of regression of the relationship between firm performance and ownership structure. The regression coefficients are reported with the associated t-values (or z-values) in parenthesis. The significance level is described as follows: * significant at the 0.10 level; ** significant at the 0.05 level; *** significant at the 0.01 level.

Appendix 3: Estimation of the Relationship Between Non-Executive Directors' Ownership and Firm Performance

Table 5.0

Estimation of the Relationship Between Non-Executive Directors' Ownership and Firm Performance

Dependent Variable: ROA Variable	Ord. Least Squares (OLS)	Random Effect GLS	Arellano - Bond GMM-Diff	Arellano - Bover/Blundell-Bond GMM-System
Non-Executive Director Ownership	-0.01	0.02	0.01	0.04
	(-0.51)	(0.90)	(0.29)	(1.11)
Firm Size	0.01***	0.01***	-0.08***	-0.00
	(4.97)	(3.17)	(-4.14)	(-0.34)
Leverage	-0.08***	-0.06***	0.03	0.00
	(-3.92)	(-2.63)	(1.17)	(0.05)
Dividend	0.07***	0.04	0.05	0.06**
	(2.70)	(1.58)	(1.40)	(1.93)
Investments	0.19***	0.14***	0.02	0.04
	(3.55)	(2.64)	(0.41)	(0.86)
Cash Flow	0.00	0.00	0.08	0.04**
	(0.93)	(1.11)	(1.61)	(2.30)
Growth Opportunity	-0.00	-0.00	-0.00	-0.00
	(-0.83)	(-0.59)	(-1.14)	(-1.43)
Tangible Assets/Sales Ratio	-0.01	-0.01	0.00	0.00
	(-2.21)	(-1.47)	(0.10)	(0.79)
ROA(t-1)			0.34***	0.37***
			(5.82)	(9.48)
Constant	0.01	0.02	0.85***	0.08
	(0.33)	(0.48)	(4.45)	(1.75)
Industry Dummy	Included	Included	Included	Included
Year Dummy	Included	Included	Included	Included
R-Square	0.1587	0.1477		
F Value	4.65			
P Value	0.00			
Wald chi 2		46.6	103.97	170.28
Prob > chi2		0.00	0.00	0.00
AR (1) test (*p-value*)			0.11	0.05
AR (2) test (*p-value*)			0.64	0.31
Observations	463	463	265	390

Notes: This table reports the result of regression of the relationship between firm performance and Non-Executive Directors' ownership structure. The regression coefficients are reported with the associated t-values
(or z-values) in parenthesis. The significance level is described as follows: * significant at the 0.10 level; ** significant at the 0.05 level; *** significant at the 0.01 level.

Appendix 4: Estimation of the Relationship Between Non-Executive Directors' Ownership and Firm Performance

Table 6.0
Estimation of the Relationship Between Institutional Ownership and Firm Performance

Dependent Variable: Tobin's Q	Ord. Least Squares	Random Effect	Arellano - Bond	Arellano - Bover/Blundell-Bond
Variable	(OLS)	GLS	GMM-Diff	GMM-System
Institutional	1.83	-0.43	-10.54**	-6.24
	(1.49)	(-0.34)	(-2.06)	(-1.29)
Firm Size	-0.36*	-0.25	1.59	-0.75
	(-1.87)	(-0.82)	(0.80)	(-1.26)
Leverage	2.29	-0.14	-4.09	-2.88
	(1.56)	(-0.11)	(-1.58)	(-0.99)
Dividend	1.95	1.04	1.04	-0.95
	(0.66)	(0.45)	(0.29)	(-0.21)
Investments	0.44	-0.26	-1.54	0.89
	(0.12)	(-0.10)	(-0.33)	(0.16)
Cash Flow	-0.02	0.02	3.24	-0.29
	(-0.09)	(0.16)	(0.68)	(-0.15)
Growth Opportunity	-0.00	-0.00	0.00	0.00
	(-0.27)	(0.04)	(0.64)	(0.08)
Tangible Assets/Sales Ratio	-0.33	-0.11	-0.18	-0.02
	(-0.93)	(-0.41)	(-0.32)	(-0.03)
Tobin's Q (t-1)			0.12	0.67***
			(1.09)	(12.86)
Constant	4.01**	4.08	-10.30	7.38
	(2.18)	(1.47)	(-0.53)	(1.26)
Industry Dummy	Included	Included	Included	Included
Year Dummy	Included	Included	Included	Included
R-Square	0.0439	0.0244		

F Value	1.12			
P Value	0.33			
Wald chi 2		22.74	22.29	204.49
Prob > chi2		0.20	0.27	0.00
AR (1) test (*p-value*)			0.22	0.28
AR (2) test (*p-value*)			0.19	0.26
Observations	456	456	275	398

Notes: This table reports the result of regression of the relationship between firm performance and Institutional ownership structure. The regression coefficients are reported with the associated t-values
(or z-values) in parenthesis. The significance level is described as follows: * significant at the 0.10 level; ** significant at the 0.05 level; *** significant at the 0.01 level.

Appendix 5: Estimation of the Relationship Between Institutional Ownership and Firm Performance

Table 6.0
Estimation of the Relationship Between Institutional Ownership and Firm Performance

Dependent Variable: ROA	**Ord. Least Squares**	**Random Effect**	**Arellano - Bond**	**Arellano - Bover/Blundell -Bond**
Variable	**(OLS)**	**GLS**	**GMM-Diff**	**GMM-System**
Institutional	0.01	0.01	0.07	0.04
	(0.72)	(0.65)	(1.33)	(1.07)
Firm Size	0.01***	0.01	-0.08***	0.00
	(4.48)	(2.94)	(-4.25)	(1.07)
Leverage	-0.07***	-0.05	0.04	-0.00

	(-3.41)	(-2.08)	(1.41)	(-0.03)
Dividend	0.17***	0.11	0.04	0.07**
	(3.90)	(2.65)	(1.21)	(2.07)
Investments	0.17***	0.13	0.00	0.02
	(3.21)	(2.43)	(0.01)	(0.57)
Cash Flow	0.00	0.00	0.09*	0.02
	(0.94)	(1.07)	(1.73)	(1.01)
Growth Opportunity	-0.00	-0.00	-0.00	-0.00
	(-0.72)	(-0.55)	(-1.44)	(-1.16)
Tangible Assets/Sales Ratio	-0.01***	-0.01	0.00	0.00
	(-2.67)	(-1.92)	(0.17)	(0.08)
ROA(t-1)			0.31***	0.36***
			(5.39)	(9.17)
Constant	0.01	0.02	0.81***	-0.01
	(0.26)	(0.50)	(4.13)	(-0.28)
Industry Dummy	Included	Included	Included	Included
Year Dummy	Included	Included	Included	Included
R-Square	0.1855	0.1797		
F Value	5.5			
P Value	0.00			
Wald chi 2		56.31	111.6	172.63
Prob > chi2		0.00	0.00	0.00
AR (1) test (*p-value*)			0.05	0.03
AR (2) test (*p-value*)			0.66	0.28
Observations	454	454	266	389

Notes: This table reports the result of regression of the relationship between firm performance and ownership structure. The regression coefficients are reported with the associated t-values (or z-values) in parenthesis. The significance level is described as follows:* significant at the 0.10 level; ** significant at the 0.05 level; *** significant at the 0.01 level.

Appendix 6: Estimation of the Relationship Between Institutional Ownership and Firm Performance

Table 7.0

Estimation of the Relationship Between Non-Institutional Ownership and Firm Performance

Dependent Variable: Tobin's Q	**Ord. Least Squares**	**Random Effect**	**Arellano - Bond**	**Arellano - Bover/Blundell-Bond**

Variable	(OLS)	GLS	GMM-Diff	GMM-System
Non Institutional	-2.83**	-0.37	-1.08	-2.69
	(-2.03)	(-0.28)	(-0.23)	(-0.55)
Firm Size	-0.30*	-0.25	1.42	-0.63
	(-1.70)	(-0.86)	(0.71)	(-1.09)
Leverage	2.06	-0.05	-2.65	-2.16
	(1.43)	(-0.04)	(-1.06)	(-0.80)
Dividend	1.59	0.91	-0.09	-1.55
	(0.56)	(0.40)	(-0.03)	(-0.35)
Investments	0.86	-0.16	-0.39	1.22
	(0.24)	(-0.06)	(-0.09)	(0.22)
Cash Flow	-0.02	0.02	3.54	-0.19
	(-0.07)	(0.15)	(0.74)	(-0.10)
Growth Opportunity	-0.00	-0.00	-0.00	-0.00
	(-0.23)	(-0.01)	(-0.03)	(-0.28)
Tangible Assets/Sales Ratio	-0.34	-0.11	-0.16	-0.06
	(-0.99)	(-0.42)	(-0.29)	(-0.09)
Tobin's Q (t-1)			0.14	0.65***
			(1.28)	(12.60)
Constant	4.68**	3.99	-12.10	6.69
	(2.55)	(1.45)	(-0.64)	(1.25)
Industry Dummy	Included	Included	Included	Included
Year Dummy	Included	Included	Included	Included
R-Square	0.0471	0.0287		
F Value	1.21			
P Value	0.25			
Wald chi 2		22.51	17.17	209.93
Prob > chi2		0.21	0.54	0.00
AR (1) test (*p-value*)			0.24	0.28
AR (2) test (*p-value*)			0.24	0.28
Observations	459	459	279	400

Notes: This table reports the result of regression of the relationship between firm performance and Non-Institutional ownership structure. The regression coefficients are reported with the associated t-values (or z-values) in parenthesis. The significance level is described as follows: * significant at the 0.10 level; ** significant at the 0.05 level; *** significant at the 0.01 level.

Appendix 7: Estimation of the Relationship Between Non-Institutional Ownership and Firm Performance

Table 8.0
Estimation of the Relationship Between Non-Institutional Ownership and Firm Performance

Dependent Variable: ROA Variable	Ord. Least Squares (OLS)	Random Effect GLS	Arellano - Bond GMM-Diff	Arellano - Bover/Blundell-Bond GMM-System
Non Institutional	-0.06***	-0.05**	-0.03	-0.07*
	(-2.82)	(-2.30)	(-0.75)	(-1.71)
Firm Size	0.01***	0.01**	-0.08***	0.01**
	(4.15)	(2.59)	(-3.89)	(2.32)
Leverage	-0.07***	-0.05**	0.02	-0.03
	(-3.54)	(-2.27)	(0.95)	(-1.20)
Dividend	0.16***	0.11**	0.05	0.08**
	(3.85)	(2.59)	(1.53)	(2.29)
Investments	0.17***	0.13**	-0.00	-0.01
	(3.24)	(2.54)	(-0.04)	(-0.28)
Cash Flow	0.00	0.00	0.09*	0.01
	(0.93)	(1.07)	(1.86)	(0.33)
Growth Opportunity	-0.00	-0.00	-0.00	-0.00
	(-0.72)	(-0.60)	(-1.24)	(-1.42)
Tangible Assets/Sales Ratio	-0.01**	-0.01*	0.00	-0.00
	(-2.47)	(-1.71)	(0.21)	(-0.46)
ROA(t-1)			0.34***	0.38***
			(6.04)	(9.58)
Constant	0.04	0.05	0.82***	-0.01
	(1.34)	(1.34)	(4.20)	(-0.21)
Industry Dummy	Included	Included	Included	Included
Year Dummy	Included	Included	Included	Included
R-Square	0.1913	0.1859		
F Value	5.76			
P Value	0.00			
Wald chi 2		58.01	102.39	169.54
Prob > chi2		0.00	0.00	0.00
AR (1) test (*p-value*)			0.06	0.05
AR (2) test (*p-value*)			0.57	0.28
Observations	457	457	270	391

Notes: This table reports the result of regression of the relationship between firm performance and Non-Institutional ownership structure. The regression coefficients are reported with the associated t-values (or z-values) in parenthesis. The significance level is described as follows:

* significant at the 0.10 level; ** significant at the 0.05 level; *** significant at the 0.01 level.

Appendix 8: Estimation of the Relationship Between Non-institutional Ownership and Firm Performance

Trend of Corruption Control (Anti-Corruption Index)

Developed Economy	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Av.P/tile
Japan	86.3	84.39	90.24	85.92	85.92	89.95	91.9	91.94	91.94	92.89	93.3	91.35	90
Newzealand	99	98.54	99.02	99.03	98.54	99.52	99.52	99.52	99.52	99.53	100	100	99
Canada	92.2	94.15	94.63	94.66	95.15	96.65	96.19	95.26	95.26	95.26	93.8	93.75	95
UK	94.6	94.63	93.17	92.72	92.23	91.39	90.95	92.42	92.42	93.36	92.8	94.23	93
USA	92.7	91.71	89.76	89.81	91.75	86.12	86.19	86.25	89.57	85.31	89.4	89.9	89
Emerging Economy													
Nigeria	6.34	11.71	10.73	15.05	21.36	17.22	15.24	10.43	10.9	9.00	7.21	11.06	12
Cameroon	11.7	11.22	13.66	16.50	17.48	18.66	16.19	12.80	5.69	9.48	10.10	12.98	13
Senegal	56.10	56.10	39.51	34.96	36.41	36.36	28.10	36.49	50.24	50.71	57.7	59.13	45
S/Africa	70.7	70.24	70.24	61.65	62.62	63.16	61.43	58.77	54.50	55.92	54.3	58.17	62
Indian	43.4	43.41	47.32	40.29	43.69	38.28	36.19	33.18	35.07	36.01	38.9	44.23	40
Peru	46.8	46.34	51.22	50	50.97	46.89	50	52.61	43.60	40.76	32.7	32.21	45
China	34.6	31.71	36.59	32.52	35.92	34.93	32.38	35.07	38.86	47.39	47.1	50.00	38

Appendix 9: The Trend of corruption control (Anti-Corruption Index)

Trend of Rule of Law Entrenchment (Legal & Judicial Index)

Developed Economy	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Av.P/tile
Japan	88	88.04	89.95	89.47	88.94	88.15	88.15	86.85	87.32	89.67	89.4	89.42	89
Newzealand	96.7	97.13	96.17	96.65	97.12	99.05	98.10	98.59	98.59	98.12	98.6	98.08	98
Canada	94.3	93.78	96.65	96.17	95.67	97.16	96.68	95.77	95.31	94.84	94.7	95.19	96
UK	93.30	91.87	94.74	92.82	92.79	94.31	94.31	92.49	92.96	92.96	94.2	93.75	93
USA	91.4	91.39	91.87	91.39	91.83	91.47	92.42	91.08	91.55	90.61	89.90	90.38	91
Emerging Economy													
Nigeria	6.7	8.13	13.4	14.35	14.42	11.84	12.32	10.8	10.33	12.21	11.5	12.98	12
Cameroon	11.00	12.44	11.48	10.53	13.46	13.74	14.69	15.02	15.96	14.55	18.8	15.87	14

Senegal	50.7	53.11	49.28	47.37	47.12	43.60	41.23	39.44	46.48	46.48	53.8	51.92	48
S/Africa	56.5	54.55	59.33	55.02	54.81	56.87	57.82	58.69	58.22	58.22	63.9	59.13	58
Indian	54.1	57.89	56.94	56.94	56.73	54.98	54.50	52.11	53.05	53.05	54.8	55.77	55
Peru	36.4	29.19	25.84	24.88	25.00	30.81	33.18	30.99	33.33	33.80	33.2	34.62	31
China	38.8	37.79	37.32	41.15	45.19	45.50	45.02	43.19	39.44	40.85	42.8	43.75	48

Appendix 10: The Trend of rule of law (Legal & Judicial Index)

Trend analysis of minority investors' protection

Emerging Economy	**2004 & 5**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**Av. Percentile**
Nigeria	N/A	53.33	53.33	53.33	53.33	53.33	53.33	53.33	53.33	53.33	60.00	53.99
Cameroon	N/A	36.67	36.67	36.67	36.67	36.67	36.67	36.67	36.67	36.67	41.67	37.17
Senegal	N/A	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	41.67	31.70
S/Africa	N/A	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	70.00	79.00
Indian	N/A	56.67	56.67	56.67	56.67	56.67	60.00	60.00	60.00	60.00	73.33	59.67
Peru	N/A	56.67	60.00	60.00	60.00	60.00	60.00	63.33	70.00	70.00	60.00	62.00
China	N/A	43.33	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	45.00	48.83

Note

Grade: Average percentile scores are graded as follows:

Very Weak	1-24 percentile
Weak	25-54 percentile
Strong	55-74 percentile
Very Strong	75 and above percentile
N/A	Data not available

Source: World Governance indicator

Appendix 11: The Trend analysis of minority investors' protection in Emerging Economies

Trend analysis of minority investors' protection

Developed Economy	**2004 & 5**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**Av. Percentile**
Jepan	N/A	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	60.00	69.00
Newzealand	N/A	96.67	96.67	96.67	96.67	96.67	96.67	96.67	96.67	96.67	83.33	95.34

Canada	N/A	83.33	83.33	83.33	83.33	83.33	83.33	83.33	86.67	86.67	76.67	83.33
UK	N/A	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	78.33	79.83
USA	N/A	83.33	83.33	83.33	83.33	83.33	83.33	83.33	83.33	82	64.67	81.33

Note

Grade: Average percentile scores are graded as follows:

Very Weak	1-24 percentile
Weak	25-54 percentile
Strong	55-74 percentile
Very Strong	75 and above percentile
N/A	Data not available

Source: World Governance indicator

Appendix 12: The Trend analysis of minority investors' protection in Developed Economies

Table 14: Correlations

		1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Tobins'Q	1.00													
2	ROA	-0.00	1.00												
3	B_ind	0.15***	0.01	1.00											
4	CEO_Tenure	0.01	0.06*	-0.09***	1.00										
5	CEO _Duality	-0.01	0.01	-0.03	0.05*	1.00									
6	FirmSize	-0.03	0.05	0.18***	-0.14***	-0.07**	1.00								
7	Invest_ment	0.01	0.04	0.04	-0.02	-0.02	0.11***	1.00							
8	Leverage	0.03	-0.12***	-0.01	-0.02	-0.00	0.05	0.07**	1.00						
9	Growth_opp	-0.01	0.00	0.00	0.00	0.03	0.15***	-0.02	-0.03	-0.04					
10	Board Size	0.10***	0.04	-0.09***	-0.11***	-0.05	0.35***	0.01	-0.05	-0.05	1.00				
11	Profitability	0.00	0.99***	0.01	0.06*	0.00	0.04	0.03	-0.12***	0	0.03	1.00			
12	Closely_held	0.06*	0.07**	0.04	-0.05	0.02	0.20***	-0.01	-0.00	0.02	-0.03	0.07**	1.00		
13	Legal/Judicial Index	0.09***	-0.05	-0.01	0.02	-0.02	-0.01	0.00	0.00	0.01	-0.06*	-0.04	-0.08**	1.00	
14	Anti_Corruption Index	0.08**	-0.05	-0.02	-0.04	0.02	-0.09***	0.06*	-0.02	0.02	-0.07**	-0.05	-0.08**	0.56***	1.00

Notes: This table reports Pearson Correlation Coefficients for all the variables in the Board Independence and Firm Performance Regression Model. The significance level is stated as follows: *** significant at 0.01 level; **significant at 0.05 level; and * significant at 0.10 level.

Appendix 13: Correlation – Board Independence-Performance Relationship

Table 15: Correlations

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Tobins'Q	1.00														
2	ROA	-0.00	1.00													
3	Women	-0.03	0.02	1.00												
4	Dwomen	-0.00	0.03	0.62***	1.00											
5	Minority	0.11***	-0.01	0.09**	0.01	1.00										
6	Dminority	0.10***	-0.03	0.11***	0.24***	0.18***	1.00									
7	Bmeet_Freq	-0.00	-0.02	0.09**	0.13***	0.03	0.08***	1.00								
8	Indep. Directors	0.15***	0.01	0.02	0.09**	0.19***	0.09**	0.09***	1.00							
9	Firm Size	-0.03	0.05	-0.12***	0.05	-0.08**	0.18***	0.13***	0.18***	1.00						
10	Leverage	0.03	-0.12***	-0.11***	-0.03	0.08**	-0.02	0.09***	-0.01	0.05	1.00					
11	Board Size	0.1***	0.04	-0.07	0.14***	-0.26***	0.28***	0.04	-0.09***	0.35***	-0.05	1.00				
12	CEO_Dual	-0.01	0.01	0.03	-0.00	-0.02	-0.06*	-0.09***	-0.03	-0.07**	0.00	-0.05	1.00			
13	Foreign CEO	-0.03	0.03	-0.13***	-0.03	-0.06	0.05	0.00	0.12***	0.33***	0.04	0.12***	-0.03	1.00		
14	Profitability	0.00	0.99***	0.07*	0.04	0.01	-0.02	-0.01	0.01	0.04	-0.12***	0.03	0.00	0.03	1.00	
15	GrowthOpp	-0.01	0.00	-0.03	-0.03	0.01	-0.03	0.01	0.00	-0.02	-0.04	-0.05	0.15***	-0.03	0.00	1.00

Notes: This table reports Pearson Correlation Coefficients for all the variables in the Gender and Minority Diversity and Firm Performance Regression Model. The significance level is stated as follows: *** significant at 0.01 level; **significant at 0.05 level; and * significant at 0.10 level.

Appendix 14: Correlation – Gender and Ethnic Minority Diversity-Performance Relationship

Table 16: Ownership Correlations

		1	2	3	4	5	6	7	8	9	10	11	12	13
1	Tobins'Q	1.00												
2	ROA	-0.00	1.00											
3	Exec. Directors Own.	-0.04	-0.05	1.00										
4	Non-executive Own	-0.04	-0.04	0.10***	1.00									
5	Institutional Own	0.05	0.03	-0.08***	-0.03	1.00								
6	Non-Institutional	-0.07*	0.01	0.06*	-0.01	-0.53***	1.00							
7	Firm Size	-0.03	0.05	-0.16***	-0.20***	0.25***	-0.18***	1.00						
	Leverage	0.03	-0.12***	0.02	-0.00	-0.21***	0.10***	0.05	1.00					
9	Dividend	0.03	0.09**	0.13***	0.00	0.07	-0.04	-0.09**	0.07*	1.00				
10	Investment	0.01	0.04	-0.08**	-0.02	0.05	-0.00	0.11***	0.07*	0.11***	1.00			
11	Cash flow	-0.01	0.01	-0.03	-0.03	0.06*	-0.04	0.08**	-0.02	0.00	0.02	1.00		
12	Growth Opportunity	-0.01	0.00	0.05	-0.01	0.00	0.01	-0.02	-0.04	-0.01	-0.03	-0.00	1.00	
13	Tangible Assets/Sales Ratio	-0.02	0.00	0.04	-0.02	-0.04	0.01	0.03	0.04	0.02	0.05	-0.01	-0.00	1.00

Notes: This table reports Pearson Correlation Coefficients for all the variables in the Ownership and Firm Performance Regression Model. The significance level is stated as follows: *** significant at 0.01 level; **significant at 0.05 level; and * significant at 0.10 level

Appendix 15: Correlation – Ownership-Performance Relationship